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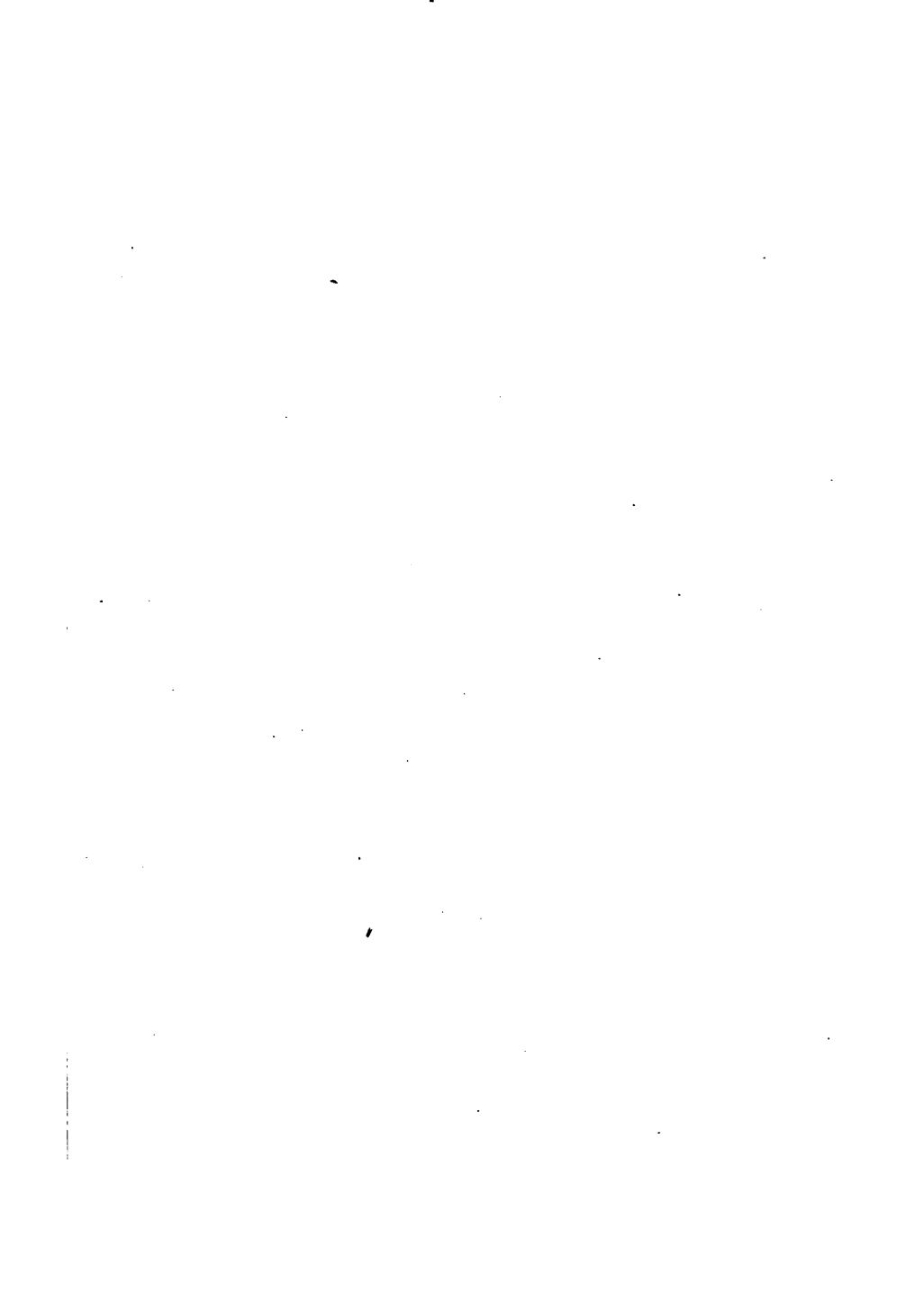


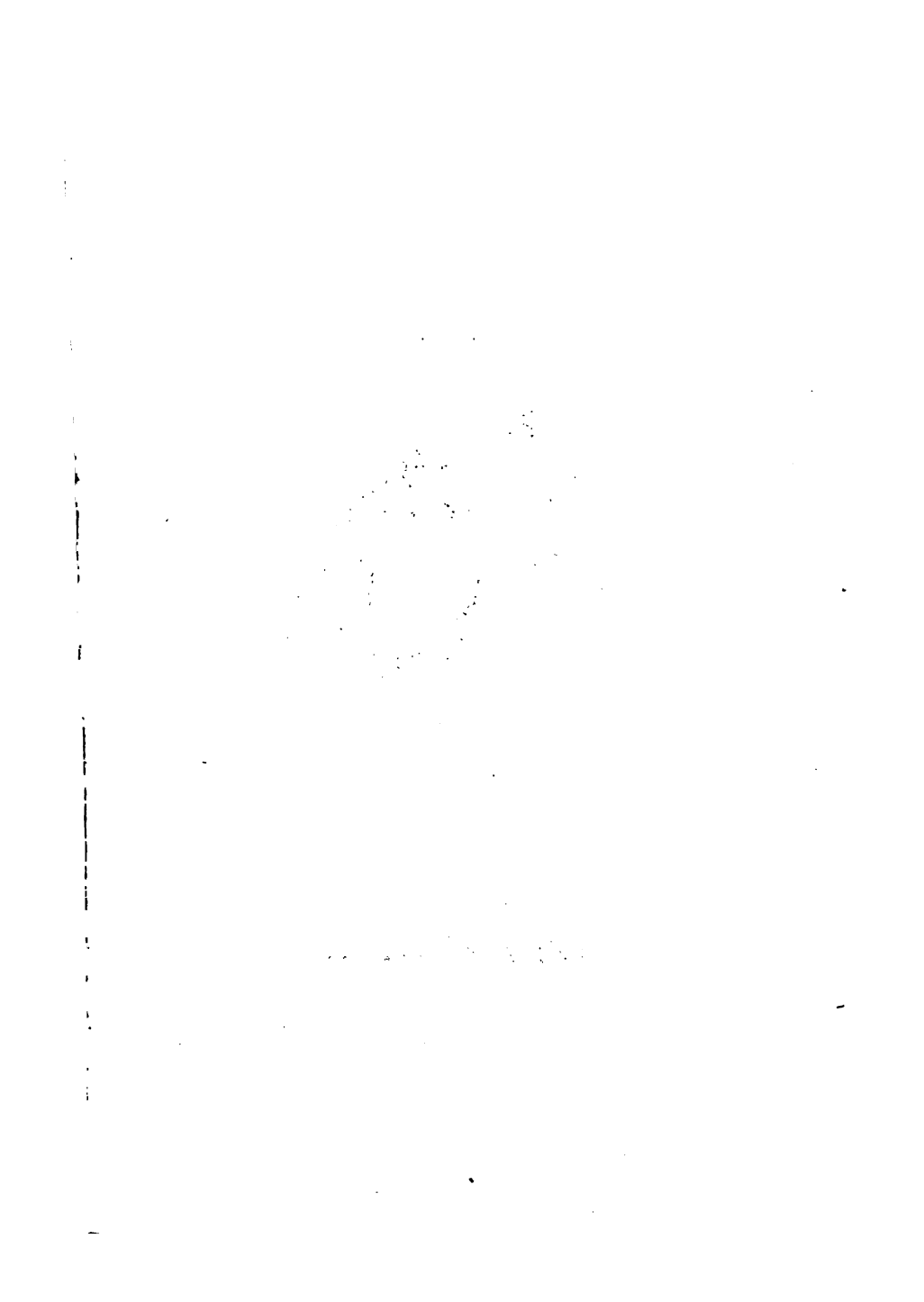
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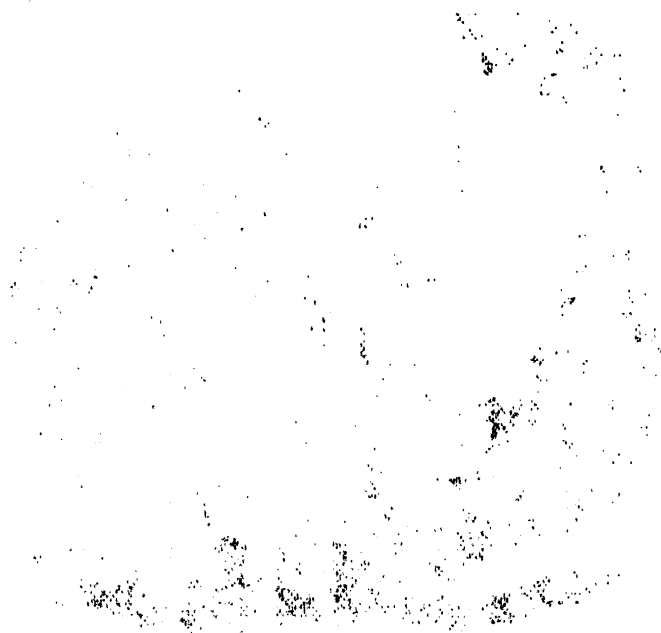


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A Visit to Europe

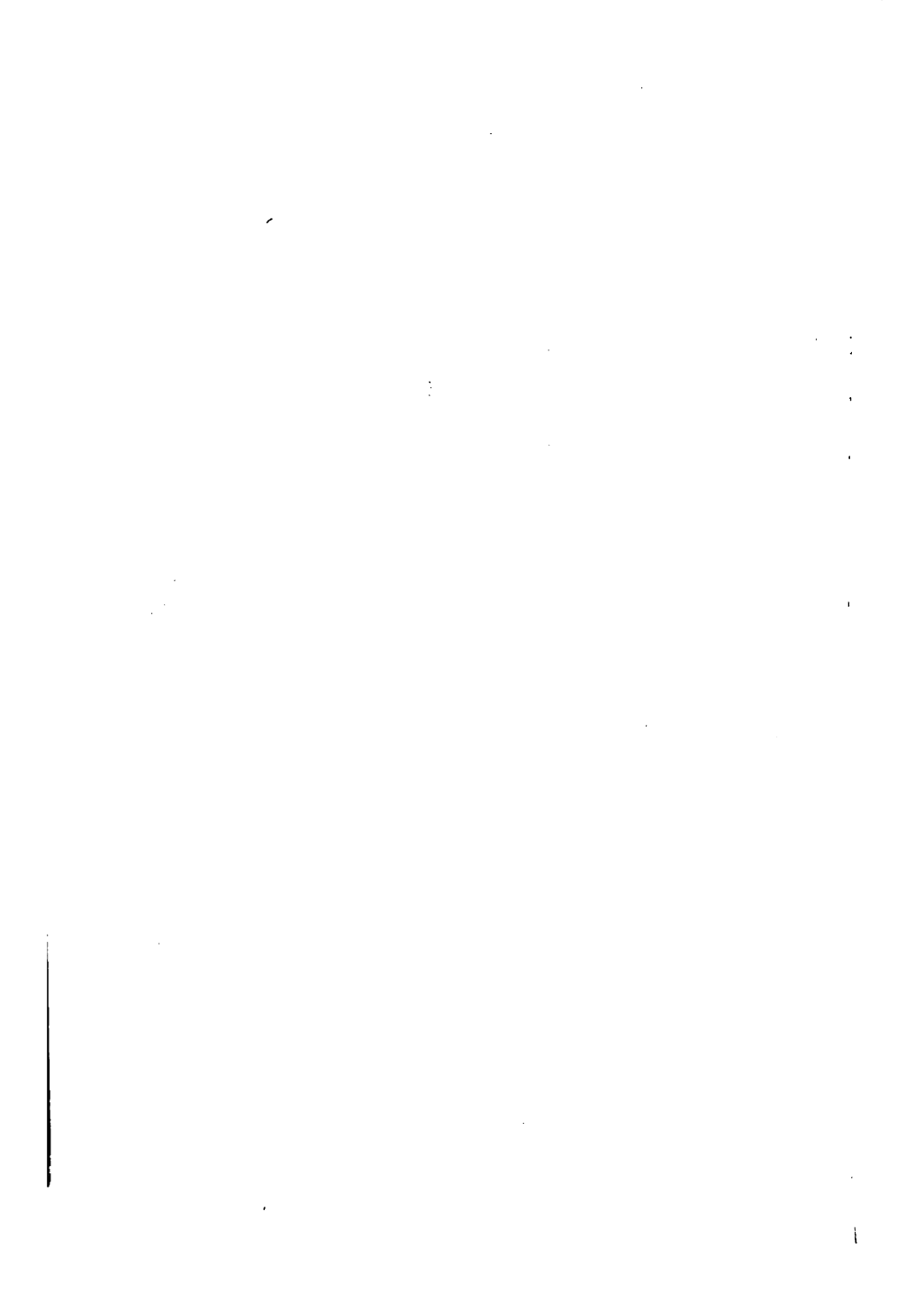
IN 1851.



Mer de Glace.

VOL. I.

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G. P. PUTNAM & COMPANY.
1853.



9

A

VISIT TO EUROPE

IN 1851.

BY

PROF. BENJAMIN SILLIMAN,

OF YALE COLLEGE.

IN TWO VOLUMES, WITH ILLUSTRATIONS.

VOLUME I.

NEW-YORK:

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INTRODUCTION AND EXPLANATION.

IN the years 1805 and 1806, I passed twelve months in Europe, chiefly in England and Scotland, with an interlude of a month in Holland and Belgium.

My observations were recorded in a journal addressed to my only brother, then, like myself, a young man; and although not originally so intended, circumstances, after a few years, induced their publication. Three successive editions appeared, and a fourth was arrested by the failure of the publisher. Although the work has been long out of print, it has not passed into oblivion, being still in request, especially by travellers about to visit the countries which it describes. Between the termination of the early tour—June, 1806, and the commencement of the recent one, March, 1851—nearly forty-five years had elapsed, and they had borne me along, on the resistless tide of time, through the most interesting scenes and relations of human life, from its bright morning to its serene evening. If an only brother prompted my early efforts, an only son induced those of a later date.

For his sake chiefly, I consented to cross the ocean again, and to put forth all requisite energy in travelling, at a period of life when most men desist from wandering, and seek the quiet of home.

Accustomed through life, when journeying, to record important observations, I readily yielded to the wishes of my

children, who invited me to do it now, and thus an unbroken record, as in my youthful travels, was preserved from the beginning to the end of the tour. As then, it was fully written out as far as possible "at the time, and on the spot." Although I wrote, in the present instance, chiefly for my children, other persons, whose judgment, taste, and candor entitle them to confidence, having perused these sketches, have recommended their publication.

Still, the writer is bound to make up his own mind, independently, as he has endeavored to do, upon the value of his observations, before he offers them to the public. The countries visited by me, and my domestic party, during the late season, were England, Wales, France, Sardinia, Tuscany, Rome, and the Roman States, Naples, and the Neapolitan States, including Sicily; also Lombardy and the Venetian States, Switzerland, Geneva and the Alps, and the Jura Mountains, Germany, Prussia, Belgium, and again France and England. These countries, it is true, are familiar to travellers; many Americans have passed over them during the late season, and they have been often described. Still, to those who have remained at home (and only a very small portion of mankind can ever travel abroad), recent narrative and description may have the freshness of novelty; the reader soon becomes identified with the traveller, and enjoys with him the beautiful and grand in nature, and the productions of human skill in the useful and ornamental arts.

While glancing over my manuscripts, with reference to the question of publication, I have found that the interest of the hour is easily revived; the enthusiasm which impelled us along through many thousand miles, in many different countries, is kindled afresh, and it is not difficult to believe that others, being made partakers of our adventures, may participate also in our excited and gratified feelings.

If my early travels were deemed instructive and interest-

ing, I may hope that those of my mature years may not prove a failure; especially as the advantage is not often enjoyed by travellers of making comparisons at periods of time so distant.

It is also true that different classes of objects will arrest the attention of different observers; the manner in which they are viewed and described will take its hue and form from the mind and taste of the writer, and therefore each work will have its own peculiar character.

The recent tour was made at a fortunate period. Europe was then, *on its surface*, in a state of profound tranquillity, and no moral or physical impediment interfered with our peaceful progress. With the advantage on the continent of an experienced and faithful courier, all matters of police, relating to passports and baggage, were successfully arranged, so that we were never stopped, and rarely hindered, nor were we for a moment placed in fear.

We saw, indeed, in many countries, the ravages of revolution and of civil war; cities scarred and mutilated by shot and shells; exploded fortresses in ruins; private dwellings and palaces burned, and entire streets with nothing remaining but smoked and tottering walls. The calm which we witnessed was, however, that of military despotism; for the bayonet and musket, the sabre and cannon, in the hands of legions of soldiers, held the people in awe, while they secured the quiet and safety of peaceful travellers like ourselves. To us, abstaining from all interference in the politics of Europe, the sublime and beautiful in nature, and the instruction which they afford in science; the monuments of antiquity; the places rendered memorable by historical events, or by physical catastrophies; galleries of the fine arts; collections in natural history; the triumphs of architecture and of engineering; establishments of physical science, and of the useful arts; eminent individuals, and the face of human society, presented sources of contemplation that were never exhausted. Safety, progress, and comfortable lodgings

being secured, we made little account of petty annoyances, and our history was, therefore, that of prosperous and happy travellers; protected on the seas and in every country, by a kind Providence, and returned to their own land without an hour's interruption by sickness, and without the slightest accident.

If the reader is willing to accompany such a party, which was cheered by the companionship of well educated and intelligent ladies, and impelled by the ardor and energy of young men, while years and experience added the balance of caution, it is hoped that he will not be disposed to desert in the progress of the journey, and that he will find it rich in sources of entertainment and instruction; although perilous adventures and hairbreadth escapes, which were never encountered, form no part of the story.

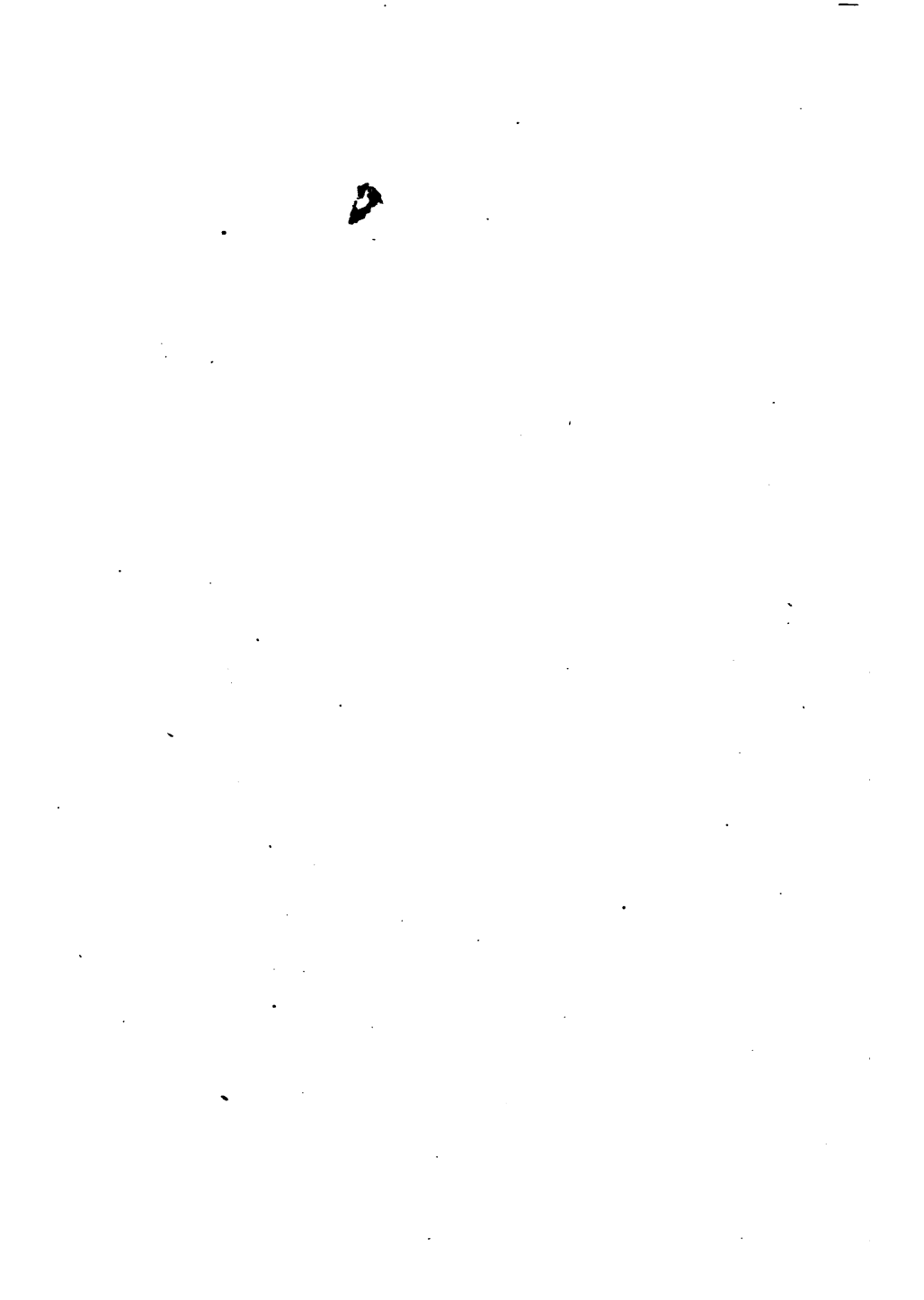
When matters of science came in our way, or were sought out by us, they were recorded in a readable and intelligible form, without unnecessary technicality, and will be found, as is believed, to harmonize with the general plan and spirit of the narrative.

Of scientific men, and other eminent individuals, I have not hesitated to write freely, because I could write favorably, and I have often mentioned their names; I have even taken that liberty sometimes in domestic scenes, but never except where they illustrated manners and the state of society, and when the notice taken of them presented the persons and their families in an attractive and favorable light. Domestic scenes of an opposite kind we never met with, and had it been otherwise, I should certainly have passed them in silence.

Topics of science (as in general they stand detached) may be omitted by persons to whom they are not interesting; they do not interfere with those more popular subjects that are attractive to all, and which form the great body of the work, while they are sufficiently numerous to give dignity to the nar-

rative, of which truth* is the soul,—truth as regards the history of the past and the delineation of the present. There is no occasion to resort to fiction, while facts are hanging up before the eyes in ripe clusters, which need only to be gathered to form a rich and grateful vintage.

* The entire narrative has been rewritten, and if there are errors, they are not those of neglect and inattention.



I

Departure from New-York and Passage to Liverpool.

March 5, 1851.

A PASSAGE to Europe, and especially to Liverpool, is so common an event, that any notice of it may seem quite superfluous.

Still, such important changes have taken place in the means of travelling by sea, since I left New-York in my former tour, April 4, 1805, that a few remarks, chiefly connected with that subject, may be interesting, especially to the youthful part of my readers.

Then (April, 1805) a few friends lingered on the pier in the East River, while the swelling sails of the Ontario soon bore us beyond their ken. The Ontario was one of the largest of the ships then in the Liverpool trade—her measurement being between 400 and 500 tons. She was, however, a weak ship—labored heavily in gales of wind, and perished, with all on board, on the homeward-bound passage.*

No other ship for Liverpool was up at that time, or I should not have hazarded a passage in her.

Nothing was then known of the noble packet ships, models of strength and beauty, with the tonnage of sloops-of-war, and

* She was injured by being stranded in coming out of the dock in Liverpool, but was repaired at great expense.

the accommodations of splendid private dwellings, which now hold a fair rivalry with the ocean steamers.

In one of these steamers, on this occasion, our party took their passage. The *Baltic*, of the Collins Line, an United States Mail Steamer, commanded by Captain Comstock, left the dock in the North River at noon, March 5, 1851. Her splendid saloons and ample decks were previously crowded by hundreds of genteel and intelligent people—some impelled by curiosity—but most of them drawn by affection, to take leave of departing friends. My own family,* with only one exception, were all present, to bid adieu to a father, and brother, and sister, and son, and the near relatives of the other members of our party of seven, were added to the group. The warning bell which remanded visitors to the shore, now cleared the decks of all except the passengers; and many a glazed eye from the pier shot upward its smiles, shining through tears, like sunbeams in an evening shower. The last bell struck its mournful peal, and the parting gun thundered *farewell!* when the chains that held the ship were dropped; the escape pipe became mute as the steam was turned upon the machinery, and in an instant the powerful wheels gave headway to the floating castle. But a few minutes of speed, every instant increased, were allowed for the waving of hands and handkerchiefs, till both they and the persons of our friends faded away in the dim distance, and before evening we had passed the Narrows and the Hook—had dismissed our pilot, and shot out into the ocean billows.

As similar passages are now made every week, the details of ours will be omitted, except a few facts illustrative of the ocean steam navigation, and of the structure and economy of

* I shall be pardoned for mentioning that *the only brother*, named in the preceding introduction, was then present, in vigorous health.

those unrivalled steamers of the Collins Line, which now so justly command the public confidence and admiration; and perhaps a few other interesting notices may be added, of a miscellaneous character.

NOTICES OF THE STRUCTURE AND ECONOMY OF THE STEAMER BALTIC.—By the courtesy of Captain Comstock, I was permitted, with my son, to examine the Baltic. I recorded my observations, and on reading them to the Captain, they were found to be correct, except a few emendations and additions.

Although the structure and economy of these ocean steamers are familiar in New-York, Boston, and a few other principal seaports, the information may be acceptable to the thousands who have not enjoyed similar opportunities. I may remark that, having crossed the ocean in two of the Collins steamers, the Baltic and the Pacific, and having examined the Arctic, while still on the stocks, and when she was near to being finished, I have had sufficient opportunities of becoming acquainted with them, and also with several of the British steamers, including those of the largest size.

SIZE OF THE BALTIC, 3200 tons, carpenter's measure; this is equal to the size of a frigate, or an Indiaman, of the first class.

The length of the Baltic is 287 feet—breadth of beam, 46 feet—depth of the hold 32 feet; to the top of the gunwale 34 feet 6 inches.

DIAMETER OF THE WHEELS 36 feet; number of floats* in each wheel 26; their length $12\frac{1}{2}$ feet; breadth 28 inches; thickness $3\frac{1}{4}$ inches; each float is armed with 300 pounds of iron, and six men are required to lift one of them.

THE ENGINE has two working cylinders, each of '96 inches inside diameter in the clear; length of stroke 10 feet; number

* Answering to the buckets or paddles of a common water-wheel of a mill.

of revolutions in a minute 11 to 14, and when the ship is light 12 to 16.

THE VACUUM is equivalent to 14 pounds upon the square inch—a near approximation to a perfect vacuum, which corresponds to 15 pounds on the square inch.

PRESSURE OF STEAM, 12 to 20 pounds upon the square inch; usually 12 to 15 pounds; this is all the amount of the power tending to produce explosion, while including what is gained by the vacuum, the effective motive power is equivalent to 26, 29 and 34 pounds on the square inch. The highest pressure used in our passage was 18 pounds, equivalent to a working force of 32 pounds, and the lowest was 7 or 8 pounds, giving a moving force of 21 or 22 pounds.

The ability of the boilers corresponds to 50 pounds, and with the addition of the vacuum to 64 pounds; it follows, therefore, that they are generally worked with less than half their power.

The entire weight of the steam machinery is 1000 tons, and it occupies 60 feet in the length of the ship.

CAPACITY FOR PASSENGERS, 160 berths, aside from the accommodations for the people of the ship.

STRENGTH OF STRUCTURE.—The timbers are fitted side by side, and calked so tight that it was said the ship would float even before she was planked. Plates of iron 6 inches wide and $1\frac{1}{4}$ inches thick, are let in, obliquely, into the timbers at the distance of 28 inches from the centres of each, and therefore they are 22 inches apart.

They are crossed obliquely by other bars, or plates of the same dimensions, which are let into the boards or planks that are nailed over them. Copper bolts, for 20 feet from the keel, pass through the plates of iron at their intersection, and in many other places, and copper sheathing covers 18 feet of the lower part of the hull, the draft being 19 feet, and 20 with the coal in.

The ships of this line are as strong as wood, iron and copper can make them, and they hardly leak at all. They would bear long thumping upon the rocks before they would go to pieces. The movement of the machinery, and the stroke of the waves produce scarcely a perceptible tremor, and not the slightest deviation in the deck from a right line can be seen, when viewed horizontally from stem to stern through its length of nearly 300 feet.

No opening of a joint is perceived even in the beams that form the capping of the gunwale; a knife-blade cannot be passed between their contiguous ends.

POSITION OF THE MACHINERY, resting on the iron bed-plate, on the keelson, or engine bed; the bed-plate, which is cast in one piece, weighs 40 tons. The machinery is below, and is invisible from the deck, except through certain doors. A wave can hardly reach it at all, even should it break over the ship; and by closing the apertures above, the engine room is safe from flooding, while ventilation is secured by large tubes, having their orifices higher than the upper or promenade deck.* The people below, on the level of the keelson, where there is little motion, hardly know when there is a storm above; they live in a comparatively quiet world of their own, and always in a tropical climate, even when among icebergs.

WORKING OF THE MACHINERY.—It travels onward with the most admirable ease and regularity; even with a heavy head wind and opposing waves, it moves like clockwork, without apparent labor, throwing up its mighty arms and moving its ponderous levers as if there were no weight to be lifted, or *vis inertiae* to be overcome.

By observations made up to the 10th day of the passage, and within 450 miles of Cape Clear, in Ireland, there had not been the slightest leak of steam, nor had it been necessary to

* Called in our Western boats the hurricane deck.

turn a screw, although for several days together we breasted a heavy head sea, impelled by adverse winds.

Except the effect of hidden flaws in the immense masses of wrought iron that form some of the principal moving parts, there seems to be little cause for anxiety, as the machinery appears to be, in general, equal to every emergency.

Danger from Fire—always a subject of anxiety; but in ships protected as the Baltic is, the danger is believed to be less than in a sailing ship. The engine room is lined with iron; the boilers and their furnaces are everywhere surrounded by that metal and by water, and no wood is in a position to be unduly heated.

All lights, except those necessary to the management of the ship, are extinguished at eleven o'clock; many people are up all night, and are about in every place; there are fire engines always ready to flood the ship, and they are adapted so as to be wrought both by hand and by steam power. Still the danger from fire is very formidable, as has been too often experienced on the lakes and rivers of North America, also in the bay of Gibraltar, in the case of the U. S. frigate *Missouri*, and very recently in the almost entire destruction of the people on board the *Amazon*, an English steamer near the Scilly light.

BEHAVIOR AS A SEA-BOAT.—Admirable in every variety of weather. This immense vessel rides upon the waves like a duck, and has, in general, a dry and comfortable deck, rarely shipping a sea—although the spray dashes over the fore-castle in showers.

I know not whether rolling is peculiarly incident to steamships; the Baltic often rolls one wheel deep under the water, where it labors hard, while the other revolves, without resistance, in the air; and thus they alternate.

Comparative Safety.—On a lee shore, or approaching breakers or icebergs, or among them, the steam vessel has a

very decided advantage, not to mention her power of advancing against winds, waves, and currents, and of making headway when, after a gale, a heavy swell, without wind, is so distressing to sailing ships; and all dangers are diminished in proportion as the time is shortened. Except danger from the breaking of machinery, there appears hardly any point in which the steamship is liable to peculiar hazard. The experience of the disabled Collins steamer, *Atlantic*, in returning to Europe over two-thirds of the width of the ocean, by the use of her sails and spars alone,* has, however, greatly increased the public confidence in this kind of vessels.

WARMING OF THE SHIP.—This is effectually accomplished by steam tubes, passing under the marble tables. A passage across the Northern Atlantic early in March—running from 42° to 52° of latitude—is of course a cold one; and as we came near the region of the floating ice, the thermometer sunk suddenly to 32°, and the decks were glazed with sleet and snow. Our cautious commander prudently steered a little south to avoid the ice; and, for myself, I had no disposition to renew the interview with the floating bergs, as I saw them, during a day and a night, in April, 1805. It was believed that we sailed within a few miles of them.

As we approached the mouth of the channel, the motion of the ship was stopped for twenty minutes, for the purpose of examining the machinery, when it was found to be in perfect order.

Numbers in the Ship.—More than 50 persons are employed about the machinery, of whom 48 attend to the coal and the fires, and there are six or eight engineers.

There are 30 to 40 servants—20 to 25 sailors, and 3 or 4 supernumerary officers—in all, about 140—besides 70 passengers—more than 200 persons in all.

* She was favored by a fair wind; otherwise her people might have been in danger of starvation.

Returning in the Pacific, we had more than 400.

STYLE AND FURNISHING.—Very elegant—rich enough for a nobleman's villa. Of mirrors, large and small, there are about 50 ; indeed, they are in such excess that a passenger cannot look in any direction without meeting his own image, or the faces of his companions. In an accidental position in which I was one day reading, I looked up, and saw six repetitions of myself, and the original made seven—equal to the entire number of our own party. Surely the most inordinate self-love would be satisfied with so many reduplications.

The table was amply supplied, and had the best attendance ; articles of animal food were packed in ice ; of luxuries there was a great abundance, and if any articles were not the best, they were too few and too unimportant to be worth mentioning.

The passengers were all courteous, and many were very agreeable ; having ladies in our party, we were entitled to sit in the ladies' cabin, in which, however, on both passages, conversation was almost drowned, when there was a heavy swell, by the incessant groaning and creaking of the partitions and doors.

The officers were very attentive to the ship, and kind to the passengers. Captain Comstock was mild and very obliging, but in command, cool and decisive, with a clear mind and sound judgment. The passengers, on their arrival, presented him with a gold chronometer of the value of £50, with resolutions of approbation for himself, his officers, and engineers.

RELIGIOUS OBSERVANCES.—Bibles and prayer-books were to be found on all the tables, and on the second Sabbath, in the English Channel, we had worship conducted by devout laymen, as there was no clergyman on board. Profane or improper language of any kind was not heard, except in the fore-castle among the sailors.

SPEED OF THE SHIP.—We descried Ireland on the tenth day Our progress had averaged 250 miles in twenty-four

hours, and we usually made ten miles an hour even against strong winds and a head sea.

It was truly admirable to see a great ship holding bravely and steadily on her course, despite of winds, waves, and currents, and making her passage in one-half or one-third of the time commonly occupied by a sailing ship; my passage out, April, 1805, was 26 days—a rapid transit for that period.

HEAD OF OLD KINSALE.—It was a bright and beautiful Sabbath morning, when, with a smooth sea and a balmy air, our decks being alive with cheerful passengers, we were ploughing our way rapidly along and very near to the Irish coast on our left, so that the land, with all its scenery, was in full view.

Here, within two or three miles, rose the rocky promontory of the Head of Old Kinsale, upon which the Albion, Captain Williams, an American packet ship for Liverpool, was wrecked in April, 1822. All the officers, most of the people, and all the cabin passengers (save one*), 40 in number, perished in the midst of a tremendous nocturnal tempest. With the aid of a good telescope and the instructions of the captain, I could identify the exact place; a vertical and lofty cliff, against which, on that fatal night, the billows broke so furiously that no one could land, and the ship immediately went to pieces.

The sight was intensely interesting to me, because our gifted Professor Fisher, of Yale College, a young man of the first promise, was among the sufferers. His talents were of a high order, and his acquisitions, for a man of 26 years of age, were wonderful in variety and accuracy, and perhaps never surpassed. He had a sensitive dread of the dangers of the sea, and did not decide on the voyage without much hesitation.†

* Mr. Everhart, of Chester, Pennsylvania.

† To his friend, Prof. Olmsted, we are indebted for an interesting memoir of him.

Arrival in Liverpool.

In such narrow seas, with rock-bound shores, serene and bright weather is ever most welcome; such weather we enjoyed; between the Tuscar Rock, the eastern point of Ireland, and Holyhead, in the Isle of Anglesea, we passed in a quiet night, and the light-houses made our course safe and certain.

The morning, however, brought fog and rain, but we dropped anchor in the Mersey at 8½ A. M., on Monday, March 17,—our passage having been accomplished in eleven days and twenty-one hours. One of the Cunard steamers had the advantage of us by one day in the length of her passage, not having deviated from her course on account of the ice. An amicable rivalry is now sustained between that fine line and the American steamers. Both perform their duty admirably, and Liverpool and New-York are virtually but 1000 miles apart.

A small English steamer soon came alongside of our lofty ship, and one of the first persons whom we recognized was Captain West, of the American steamer *Atlantic*, respecting which vessel such intense solicitude had been experienced at home. We were gratified to learn that on examination of the broken shaft at Birmingham, no flaw or fault had been discovered in the iron; the fracture arose simply from mechanical stress, a greater task having been assigned to it in impelling so large a vessel against the winds and the waves, than it was able to accomplish.

Similar accidents have occurred repeatedly among the British Steamers.

England---Liverpool.

THE LANDING.—The small steamer took first the baggage on shore, and after a delay of two hours (not very patiently endured by the passengers, who, being unwilling to remain below, were standing out in the fog and rain), we all passed down the long and steep stairs, which placed us safely on the deck of the humble tender; and soon, with hearts grateful to our Infinite Preserver, we gladly leaped upon the quay, and I was truly happy to tread again the soil of Old England. It seemed as if the many years which had passed since I was here in my youth, were expunged, and that the two periods were fused into one. Such a feeling was, however, instantly repressed by the certainty that most of those whom I had known, when I was here before, must have passed away, and that it would be happy if a single individual known to me here at that period, should now be found.

Liverpool.

March 17.

MR. JOHN TAYLOR.—Such an individual was, however, found. In my former visit to England, an accidental meeting in May, 1805, in a stage-coach, on a ride between Liverpool and Manchester, secured to me from a citizen of that place, useful and agreeable attentions and domestic hospitality. The mutual kindness thus produced, did not die away, and in later years has been revived and cherished by correspondence.

I trust it is not improper to add that my friend, Mr. John Taylor, formerly of Manchester, but for many years an

eminent merchant in Liverpool, being informed of our intended visit to Europe, had kindly made every arrangement for our accommodation, and his servant was on the wharf waiting our landing, with a letter explaining the details. My son and our younger friend and fellow-traveller, Mr. B., proceeded to the Custom House, and without trouble or delay, passed our baggage. Under the guidance of Mr. Taylor's servant, I proceeded with the ladies and our two young gentlemen, Messrs. C. and F., to our appointed home, the Stork Hotel in Queen's Square, where we were soon rejoined by our friends with the luggage from the Custom House. Here, through the kind care of Mr. Taylor, we found the fire burning in our pleasant parlor, and our bed-rooms all ready for our reception. Thus we were immediately domesticated, and at once felt at home in England;—in half an hour I had the pleasure, in our parlor, of taking my old friend by the hand, and of receiving, with my companions, his hearty welcome to the fatherland.

A hearty welcome indeed it was, with an equally cordial response. We parted, it is true, in the morning of life, and we now met again in its sober evening; but although the snows had descended upon our heads, and had not melted, the social warmth, like the fires which glow in the bosom of snowy Etna, had not burned out, and we soon became young again.

We might have passed in the street without recognition, but former impressions were soon revived, and although my early friend had now blanched locks, he bore no mark of infirmity. I found him, both mentally and physically, in full vigor—his natural ardor not abated, his manners most amiable and kind, and he entered into our views and plans with great zeal and intelligence; his features, person, and manner gradually reinstated themselves in my recollection, and we travelled back in turn to his worthy father's house in Manchester, and began again where we had left off in our youth.

The rain and the grateful repose from the agitation of the sea, with a dinner served up to our party in the peculiarly comfortable style of Old England, not a whit abated from the good taste of gone-by years, gave us a delightful feeling of home; and our sympathies for the homes we had left were quickened by an unanimous resort, in the evening, to our pens, to give our friends in America the assurance of our safety and happiness; nor did we forget, as a family, to return thanks to Heaven for our safe and rapid passage, and for the happy entrance upon our European travels.

OTHER FRIENDS.—I soon found that I had been too hasty in concluding that, in Liverpool, we should be both unknowing and unknown. We were warmly greeted by Mr. Washington Jackson and his son, and the amiable ladies of that interesting family, all of whom we had known in New Orleans and in New Haven; nor less cordial was Mr. Clare, an intelligent young gentleman of Liverpool, whom I had known at my own house, and who also had now a home of his own, graced by a lovely wife, and a circle of friends, who made an evening at their house very pleasant to me. A home was warmly proffered to us by the Jacksons, but as our stay would be short, it was not in our power to accept their hospitable overtures.

Among those whom I knew in 1805, I no longer found Mr. Freme and his estimable lady, nor Mr. Ewart, with his high official friends, nor the accomplished scholar, historian and poet, Roscoe; and no wonder, for the time which bears away a generation of men, and half another, had passed, and those, now in the meridian or even in the early evening twilight of life, both in Liverpool and every where else, were then children, and not a few of them unborn.

From what we now saw of the people we could not entertain a doubt that, had we allowed ourselves time to cultivate the society of individuals, we should have found all the kindness and all the useful services which we could have desired.

But we were in haste to proceed to the continent, and therefore we had not the leisure at command which this great city deserved.

We enjoyed the hospitality of Mr. Taylor, and during the hours passed at his house received much interesting information on many subjects.

It is indeed extraordinary that a man of business—a merchant, who is constant in his counting-room, and vigilant in watching the markets, should have a mind overflowing with knowledge, as his heart is with kindness. Astronomy, classical literature, poetry, history, antiquities and the fine arts, commerce and manufactures, public policy and efforts of benevolence, all find a lodgment in his capacious mind. He is a warm friend to the liberties of mankind, but is not a bigoted adherent to any party in his own country, in which he takes an independent position for its prosperity. He is a decided friend to the United States, as was his father before him, who was also a warm admirer of Washington;—the family being from Scotland, they have an hereditary right to be lovers of liberty. Mr. Taylor is an amateur astronomer, and has sustained a correspondence with some of the most eminent astronomers of the day, Sir John Herschel, Encke, Airy, Le Verrier, and others. When we were about to leave Liverpool, he furnished us with written instructions and memoranda as to the interesting objects on our proposed route (which will soon be mentioned), and we found all his suggestions to be correct, especially as to what related to antiquities and the physical features of the country. He gave us also letters of introduction to some of the most eminent philosophers in Rome.

In 1805 I had more leisure, and in my former journal, Liverpool, as it then was, is described with sufficient fulness, and those who have perused that work will appreciate the few comparisons which it was now in my power to make.

Liverpool in 1851.

This city is so enlarged and changed since my former visit, that, except for its position on the Mersey, I should hardly know it to be the same place. Its population was then estimated to be 80,000—now it is 350,000. The population of New-York was, at that time, about equal to that of Liverpool; now New-York has more than 500,000 people, exclusive of Brooklyn and the other vicinal cities around the bay, which may add 150,000 or 200,000 more.

The houses of Liverpool cover a vastly more extended area than in 1805, and they have every appearance of wealth and comfort. There are many new and magnificent streets and squares, and public buildings.

The Town Hall, St. George's Hall, the Harmonic Hall, the Custom House, the Post Office, the Sailor's Home, the Exchange and many other structures of hewn stone—which also is the material of many of the more modern private dwellings,—give the city an air of dignity and permanency.

The Town Hall is elegantly fitted up; it contains all necessary public offices, and a spacious ball-room, with the appendages of drawing-room and supper-room. On the great staircase is a beautiful statue of the Hon. George Canning, of sarcastic memory, for many years a Member of Parliament for Liverpool. His fling at the American National Flag as "*a few yards of striped bunting*," probably exalted the heroism of those who fought under it.

St. George's Hall is another splendid building, erected for the courts, for concerts, balls, &c.

In these buildings there are many columns made of granite, and of imitations of it so perfect that they can hardly be dis-

tinguished from the true granite. Near the Town Hall is the Exchange, a vast building, included in three sides of a square; it is thronged with the business men of this great emporium of commerce. In the centre of its area is a grand monument, to the memory of Lord Nelson, accompanied by the emblematical figures of Death and Victory; while on the pedestal his battles are represented in relief.

The Exchange Building was begun in 1809, and includes all the offices and accommodations necessary to commerce, and the news-room contains, as is said, all the papers of the world. The churches are numerous; we were not here on the Sabbath, and did not enter any of them. The Institution for the Blind, which I visited in 1805, is now removed to a larger and better building, and is in vigorous and useful operation. The blind inmates make excellent baskets, cord, mats, &c. There is an excellent Institution for the Deaf and Dumb, and there are several hospitals and other charitable institutions.

The Botanic Garden and Athenæum, which I saw in 1805, are still cherished and sustained, and a Zoological Garden has been introduced, which is furnished with many beautiful living animals.

ST. JAMES'S CEMETERY.—The large and deep stone quarry, once *near* the city, which I saw and described in 1805, is now included *within the city*, being converted into a Cemetery, and is a beautiful and solemn place. Its walls are covered with vines, and it is nearly filled with monuments of those who have departed during the last 46 years. We descended into this elegant Necropolis, which is in the finest order; the monuments are in perfect preservation; they are kept in a neat and decent condition, and this deep-seated repository of the dead, sloping upward and expanding in full daylight in the midst of a great city, is an affecting sight; it would be picturesque if it were not so solemn.

The most interesting object to us was the tomb of Mr. Hus-

kisson, the distinguished Member of Parliament from Liverpool, who was killed at Parkside by a railroad engine, Sept. 15, 1830, in the presence of Lord Wellington, and other distinguished men, who had convened to celebrate the completion of the Liverpool and Manchester Railroad. Owing, it is said, to a nervous excitability, he lost his self-possession, when, being on the ground on the approach of the engine, he took the wrong course, and lost his life by a fatal wound.

His tomb is a beautiful temple, and his statue stands in the midst of it.

Near the Custom House there is a grand bronze statue of Mr. Huskisson, cast at Munich, and presented by the widow of the illustrious statesman.

There is also in Liverpool a large necropolis—"a spacious burying-ground for persons of all denominations;" it is on the Brunswick road.

THE RAILROAD STATIONS in Liverpool are excellent structures. They are made of iron, and other incombustible materials, and are spacious, airy, lofty and elegant.

There is a tunnel connected with the London and North-west Railway Station, which runs through to Edge Hill, 2,230 yards, more than a mile and a quarter; its breadth is 25 feet, and its height 17 feet. Many railroads communicate directly or indirectly with Liverpool, and have added immensely to its commerce.

THE STREETS are in the main extremely well paved, and they are lighted by gas. The middle of the street is macadamized in a manner truly admirable, and, this being the carriage way, is so smooth and hard that the wheels roll over it with a most agreeable motion, as on the floor of a house. One horse will convey four or five, or even six persons in a large and heavy carriage.

THE DOCKS, as they were in 1805, were described in my former work. Then there were few of them; only six wet

docks, and a few dry docks; now they extend at least six miles along the east bank of the Mersey, on which Liverpool is situated, and they have been introduced also at Birkenhead, on the opposite side of the river. The docks are the glory of Liverpool; they are rendered necessary by the tides of 12 to 30 feet, and large ships cannot remain in safety in the channel of the river, unless it be far down in the offing. As we rode along these splendid docks, mile after mile, we saw ships of all flags and of all nations, and of every form of naval architecture, and with crews of all hues and costumes, and their sailing boards on the shrouds, gave notice of their destination for all parts of the world: India, Japan, Australia, both Americas, &c. The wharves, too, were alive with all the land-stir of commerce; there were carts of all sizes and forms, loaded with the merchandise of the world, but there was no crowding and jostling, because there was room enough, and a good police and civil manners made every thing easy.

We admired much the massy gates and bridges connected with the docks, and the great facility with which they were moved. The system of docks both here and in London, is without a parallel in the world.

THE LANDING-STAGE.—This is an immense floating pier, rendered necessary by the great variation between high and low-water mark. It is 507 feet long, and 80 feet 7 inches broad. It rests on 39 pontoons, sustaining a weight of 2000 tons; it contains 49,000 cubic feet of wood, and cost 40,000 pounds. It was first moored in its present position June 1, 1847,* and we experienced the great convenience which it affords. We have floating docks at New-York, but our tides are inconsiderable compared with those of the Mersey.

COMMERCE OF LIVERPOOL.—This city is now said to be the resort of more sea-going vessels than any port in the world,

* Guide to Liverpool.

and it is asserted that New-York is next; I cannot vouch for the correctness of this position. London has an immense number of ships, and it may be safely asserted, that these three ports are, as regards ships and commerce, the leading ones of the whole world.

At New-York, including the wharves on both the East and North Rivers, the ships probably extend six miles, and at New Orleans they reach nearly as far, including the river boats and steamers; but the ships are not, in the two cases last named, clustered together in such masses as are seen in the English docks. Mobile has sometimes a fleet of 100 sail, chiefly foreign, anchored 30 miles out in its bay, waiting for cotton, which is brought off in tenders.

Royal Institute.

This Institution was not in existence at the time of my former visit, and we were much gratified with the contents of these rooms.

They contain, chiefly, collections in Natural History in its principal departments.

THE BIRDS are very numerous, and put up in fine order behind glass cases, which cover entirely all the sides of a large room, and the cases are full.

There are two ostriches—an African, and an Asiatic—and also a South American cassowary. Their feet are small, compared with those of the birds that made the impressions in the red sandstone of the Connecticut river valley, or compared with the actual feet of the Moa of New Zealand, an extinct bird, whose other bones are in harmony with the feet. The dimensions of the Moa (of which more hereafter) make every thing credible

which has been said and written respecting the fossil birds of the valley of the Connecticut; and it is thus proved that no existing birds can compare, for colossal dimensions, with those that formerly inhabited New Zealand, and, in early geological ages, the valley of the Connecticut River.

In this collection, the family of humming-birds is fully represented, and their delicate forms are exquisitely exhibited.

THE CRUSTACEÆ are unrivalled in the perfection of their figures and structure, the minutest and most delicate parts being perfectly preserved, and there is a wonderful variety in their dimensions, from those that are very small, size of a finger nail, to those that would fill a large dinner plate; gigantic, at least upon the common scale of the size of crabs—et id omne genus.

Many of the GEOLOGICAL SPECIMENS in the collection are excellent. There is *silicified wood* in great masses—enormous trunks of trees—from Australia. The impressions of *Chirotheria* (animals with hands) are here in great perfection; both the impressions, i. e., the concave made by the pressure of the feet of the animal in plastic materials—and also the convex or relief made by the filling up of the concave. Of course, the animal could have made only the concave or hollow, and the matter which filled it up and made a convex form in relief, came in afterwards.

The Chirotherial impressions were first found at Heidelberghausen, in Germany, but were afterwards discovered in Scotland, and at the Storeton Quarry of Sandstone, near to Liverpool, on the opposite side of the Mersey.

The largest that are there found, are of the size of the hand of a mature man—as if he had pressed his hand upon soft and yielding clay, which was still firm enough to retain the impression. These constitute a leading feature in the collection. The impressions are very numerous at the Storeton Quarry, especially the smaller ones, many of which are of the hind feet; and they are mixed with impressions made by other kinds

of animals, perhaps of tortoises—and there are also impressions of vegetables.

The opinion is entertained among geologists that the *Chirotherium* (called also the *Labyrinthodon*, from the complex involutions of the structure of the tooth), was a gigantic frog, whose size was equal to that of the ox; and if his vocal powers were in proportion to those of his humbler representative of our day—the bullfrog—he must have been a tremendous thunderer.

Bones have been discovered, supposed to belong to the *Chirotherium*, and from these the inferences have been drawn respecting the character of the animal that made the impressions. No doubt can be entertained that these animals, and many others—tortoises, birds, and various reptiles—walked or crawled upon the then soft and yielding material that now forms our upper, or new red sandstone.

THE FOSSIL IRISH ELK, *MEGALOCERVUS*.—There is here a very perfect pair of horns of the gigantic extinct Irish elk; they are attached to the head, which is small, and seems out of all proportion to its vast appendages. We measured these horns; from tip to tip of the antlers was nine to ten feet, and along the curve of both horns fifteen to eighteen feet. These animals must have been, in past ages, very numerous in Ireland and in some other countries. We saw many specimens of these horns in the continental cabinets. Nothing of the deer family now existing on earth, can compare for size and noble mien with these magnificent animals, of which the last may have been destroyed by the hand of man,* with whom it is very possible that they may have been contemporary. As in the case of other deer, the horns, enormous as they were, fell off annually, and of course were as often renewed. They were

* Prof. Owen, at the Museum of the College of Surgeons, London, said to us, that he gave no credit to the asserted associations of the remains of the Irish elk with those of man, but Dr. Mantell thought that their era might have reached the human.

peculiar to the male, in analogy with the habits of the family. We saw entire skeletons in several museums on the Continent, and therefore we are acquainted with the perfect form of the animal, and are sure, from his organization, that his habits were the same as those that characterize the race of deer at the present time.

THE TELEOSAURUS.—There is here a very perfect specimen of this ancient fossil lizard, ages ago extinct, along with his fellows of the same family. The skeleton is six or seven feet long.

THE ICHTHYOSAURUS, or *Fish Lizard*.—There is here a model of the cranium, in which the orbit of the eye would receive the head of an infant.

RECENT SAURIANS, or *Lizards*.—There are many specimens of those now living—alligators, &c.

THE HIPPOPOTAMUS.—A very large stuffed specimen, and the skeleton of a smaller individual of a different species. There is also an immense seal, and there are many other interesting things which I cannot enumerate.

On the opposite side of the street, there is a collection in the fine arts—but the picture gallery could be but very imperfectly seen, as most of the pictures were taken down to be cleaned.

There are also numerous casts of the Elgin marbles, and of the most celebrated ancient statues—the Apollo of Belvidere, Gladiators, Venus, &c., but they are all so blackened by coal dust, that they have lost all their beauty.

Has Liverpool more smoke, or less care than London, where there are many casts and statues that are kept clean?

MISCELLANEOUS.—Liverpool, as a place of trade and wealth, is a modern town. It was anciently a small fishing village, and has risen into consequence within a century and a half.

When ship money was levied in 1636, Liverpool paid 25 pounds—Lancaster, 30—Chester, 26—and Preston 40 pounds. In 1650 Liverpool had 24 vessels of 460 tons, and navigated

by 76 seamen. The population of Liverpool was, in 1700, only 5,000; in 1760, 26,000; in 1790, 56,000; in 1811, 94,376; now three to four hundred thousand. In 1709, the slave trade began in Liverpool, and was zealously pursued for a century.

In 1805, I went on board of a new slave ship in Liverpool. It was just finished, and had not then been employed. I went below deck, and examined the narrow cells and the chains, which were as yet unstained with blood, but they were all ready for the victims which, no doubt, were found and transported from Africa into slavery, in that very ship.

Our English friends, when they taunt us Americans on this subject, should remember that they forced slavery upon us when we were their colonies. George III., in 1774, disallowed an act of the legislature of Virginia, prohibiting the slave trade; because he said it "would be very injurious to the commerce of His Majesty's subjects." * The reformation of the parent is rather too recent to justify recrimination on the child, while no justification of either can be sustained before God or man, and so reports the grand moral inquest of the world.

Liverpool sustained the most vigorous and persevering opposition to the suppression of the slave trade, and this spirit was in full activity in 1805, when I was there. At the table of a very eminent gentleman, well known to fame, I heard the efforts of Mr. Wilberforce on that subject decried, and it was remarked that he was a very worthy man with good intentions, but *rather overdone with religion*; a charge which I did not think could have been sustained against a convivial clergyman—one of the party—whose tongue took rather a free license.

I have no disposition to upbraid Liverpool for its old sin—the *slave trade*—rejoicing that it has been now many years done away, as is the fact, also, with my own country, which has,

* I saw this rescript framed in the Athenæum of Philadelphia.

however, substituted a domestic slave trade, from the middle slave States to the southern and south-western States, for which we are justly reproached. I forbear from any discussion of the great sin, shame, and danger of slavery, but I wish to recall the fact of the Liverpool slave ship, which I mentioned in my early work—and also the rescript of George III.—that I may temper a little the severity of English recrimination. In the language of our celebrated native singers—the Hutchinsons—

“Wait a little longer,
Better times a coming!”

The Mersey is $1\frac{1}{2}$ miles wide at its mouth, while, a few miles above, it is seven miles wide. It presents a scene of great animation. A long forest of masts lines its shores, and innumerable boats and steamers are constantly plying upon its waters.

The view from the river and from the opposite shore exhibits Liverpool to great advantage, as it rises from the water by a gentle ascent ending in hills; and villas and other tasteful mansions are seen all along the shores and upon the rising grounds, and in the suburbs.

Light-houses and windmills are conspicuous objects in the vicinity of Liverpool, and the English and Irish Channels leading to this city are well lighted. Parties of pleasure make excursions from Liverpool to places situated on the banks of the Mersey; but the steamers in which they embark, although doubtless constructed with a leading view to safety, are not distinguished for elegance. They are very plain, and do not present the showy appearance of the American steamers.

Concluding Remarks on Liverpool.—March 20.—Our three days in Liverpool were very industriously employed in seeing the city, and some of its principal lions. Good carriages and excellent streets gave great facilities for locomotion; and short

as the time was, it proved sufficient to stereotype this great and opulent city in our minds, so that its lineaments will never be effaced. To myself, who retained the most distinct recollection of its aspect forty-six years ago, and could refer to my own record of its appearance then, the present review was indeed most interesting; and I have endeavored to describe some of the changes that have intervened. They have been scarcely exceeded by those of our American, unless we except some of the Western cities. The population of Liverpool has been more than quadrupled in less than half a century, and its buildings, public and private, its fleets of merchant ships, the immense docks to receive them, the commerce which they bring, and the wealth accumulated both by sea and by those great internal arteries of trade, railroads and canals—all these and with them good Institutions of every name, have increased in the same proportion, and the city, which was once stigmatized by a wicked traffic, now holds the proud pre-eminence of being the queen of lawful sea-going commerce.

POVERTY IN THE MIDST OF WEALTH.—It was painful to us to observe that, in the midst of the splendor of Liverpool, there are the most distressing marks of poverty. In front of our hotel there was a large concourse of people, from early morning, to attend on a market day. Among them, although the weather was still quite cold, there were many children and girls without stockings or shoes, and their clothes so tattered and scanty, that neither comfort nor decency could be consulted. Hardly did we see in Italy and Naples more revolting objects, or those whose claims for charity appeared more urgent. The English are a wise and humane people, and spare neither money nor effort in providing for the claims of humanity; but, although disposed to view this subject candidly, I have not been able to learn why these sufferers are not provided for, if deserving of charity, or not subjected to confinement, and a wholesome discipline, if they are shiftless, because they are worthless. Perhaps

Ireland, as indeed we are assured, contributes largely to this mendicancy; probably New-York, if examined, would present spectacles as revolting as those which we saw in Liverpool; and it is certain that the flood of emigration to the United States, probably an average of 1000 persons in a day, must add, among many worthy, many more of the reckless and forlorn to our population.

Departure from Liverpool.

March 30.

An Incident.—Our party leaving Liverpool for the present, took passage at 10 o'clock, A. M., in a steam ferry-boat, to cross the Mersey, and we were soon landed in the opposite village of Birkenhead. In this short time we formed an acquaintance with an intelligent and gentlemanly man in the evening of life. Casual remarks and inquiries on our part, were courteously attended to by him, and we interchanged our cards. The interest which he manifested in us as Americans, was doubtless increased by his having a son in our country. We informed him of our proposed route, and of the day when we expected to be in Birmingham, a few miles from which city was his residence. He volunteered to call on us, and to show us the town, but we had to regret that our prolonged stay in Wales deprived us of the pleasure of meeting Dr. G—— again, for we found that he had called punctually at our hotel. The incident, in itself of little importance, is creditable to English manners. We were trusted on our word, by this gentleman, who was a surgeon, and had served in the English Navy.

RIDE TO CHESTER.—On landing, we found the railroad cars ready. There are here no long cars, as with us. Those of the first class are divided into separate coaches, each having two seats to contain six people; the seats are divided by low

sides, and have leaning places for the arms and for the head, to favor sleep; three large easy chairs, placed side by side, would resemble the arrangement in these cars. We managed to receive our party of seven into one coach, and rode very comfortably and sociably. The country through which we travelled was beautiful; the fields were green and highly cultivated; the buildings were good, and there was, in the rural scenes, no appearance of poverty.

Chester.

We were soon at Chester, and in the city and its vicinity, being busily employed, we lingered until six in the evening.

This town is venerable on account of its high antiquity, as it was coeval with the British, Roman, and Saxon times. It was long a Roman station, and is still inclosed completely by a wall, which is two miles in circuit; it is constructed of hewn stone, to the height of 20 feet, and several of the towers remain. We ascended one of these, the Phoenix, from which Charles I., in September, 1645, was a spectator of a battle, in which his troops were defeated at Marston Moor, or Waverton Heath, by the forces of the Parliament.

Chester was loyal; it bravely sustained a siege of five months in the year 1647, and was finally reduced by famine and distress. In two months, more than 2000 of the inhabitants died from the pressure of the siege. It was civil war—brethren fighting against each other.

The walls of Chester are still entire, and our walk upon them gave us fine views of a very beautiful country; the river Dee, on which Chester stands, was at our feet, and the distant mountains of Wales on the northwest rose in misty grandeur.

The town contains 25,000 inhabitants, the population being

about that of our New Haven, but being inclosed within walls, it covers a much smaller area. It is, in general, well built; there are many modern houses, but most of them are in the old English style, and afford us interesting information as to the accommodations of the people, in centuries long past. The appearance is venerable; it is grotesque, and in general highly unarchitectural. The four gates of the city are on the site of the ancient Roman portals, and we ride into it under arches, that bestride the streets.

Five Roman roads come to a centre here, and now five principal railways have their terminus in Chester.

The streets, corresponding to the modern gateways, run at right angles north and south. They were originally sunk by excavation far below the level of the ground, and the people crossed on arches. Although the ancient deep cutting is half filled up, we still, as we walk on the ground, see the people in their houses above the level of the street, although they are on what would usually be called the ground floor.

The front of the houses in the lower story recedes, so as to present a continued portico, or piazza—a covered walk, through which the people freely pass, as in the streets of other towns. Still farther in and below are the shops, and the actual fronts of the dwelling houses give an air of freedom and sociability, very much in contrast with the closed doors and latticed and curtained windows of most other cities.

It was amusing to us to walk along this covered and elevated thoroughfare, mingling with the people, and to pass from it familiarly into the open doors of the contiguous shops, situated beneath the second story of the houses, which project over them. Thus, in those parts of the town where this ancient arrangement is preserved, the pedestrians are completely protected from the weather.

We afterwards saw a similar structure in Berne, and in Bologna.

Chester contains many relics of the Romans. The twentieth legion garrisoned Chester in the year 61 of Christ. Its name, from the Latin *castrum* (camp), recalls its Roman origin. Roman altars, coins, pottery, tiles with Roman stamps, tessellated pavements, baths and catacombs, attest a long possession of Chester by the Romans. It was evidently regarded by them as an important station.

ROMAN BATH.—Beneath the Feather Inn we entered, as through a cellar, into an excavation in the solid rock; it was supported by short pillars, and the place was so low that we were obliged to stoop in order to enter; the floor is still occupied by water, and there is a sudatory above, into which steam or heated air passed through holes in the vault of the lower room, where the heat was raised. The place which we saw was narrow and low, confined and disagreeable, and strongly contrasted with the luxurious baths, whose splendid ruins we afterwards saw in Rome.

A CRYPT, of unknown antiquity, is on the opposite side of the street. We entered it through an underground room, which was occupied as a shop.

The Crypt is 45 feet long, $15\frac{1}{2}$ broad, and 11 high. It was a place of worship, as appears from a baptismal font of marble at the remote end of the room. It is in the Gothic style, but with round arches, and is in high preservation. It was a monastic building.

THE ANCIENT ABBEY AND CATHEDRAL.—We visited the ancient Cathedral and Abbey, objects of extreme interest to our party, none of whom, myself excepted, had ever seen such buildings. The Cathedral is 372 feet long on the outside, 350 within; height of the ceiling 73 feet, and of the tower 127. It has a fine organ, and numerous sepulchral monuments; its cloisters are deservedly celebrated.

Among the images, some had lost their heads by violence or wantonness, and an unskilful mason repaired them with so

little fact that a King's head was placed upon a queen's shoulder, and the reverse, and a monarch crowned the bust of a virgin. These structures are extremely venerable from age, and association with gone by centuries; and perhaps our veneration is increased by the state of dilapidation in which they now exist. They and other ancient buildings in Chester were constructed of a deep-colored red sandstone, which exists in this part of England; it is the upper red belonging to the salt formation, and exfoliates in the weather, so that most of the ornamental carved work on the Cathedral and in the cloisters, especially that on the exterior, is defaced, or utterly ruined; many of the prominent parts have fallen off.

MISCELLANEOUS.—Probably no city in England presents such striking proofs of antiquity as Chester. It is so identified with antiquity, that while there we can easily imagine ourselves cotemporary with the Romans, with the Britons, and the Saxons.

Chester was formerly a place of great trade, long before Liverpool had even a name to live; but the filling up of the channel of the Dee with sand, and the rivalry of Liverpool, have caused it to decline. Chester exhibits in its bill of mortality decisive proof of the salubrity of its position. The deaths are annually 1 in 40, while Liverpool loses 1 in $27\frac{1}{2}$, Manchester 1 in 28, Edinburgh 1 in 20, London 1 in $20\frac{1}{2}$; New Haven, in Connecticut, loses 1 in 55.

ANECDOTE.—It is recorded that A. D. 1558, Henry Cole, Dean of St. Paul's, stopped at Chester on his way to Ireland, commissioned by Queen Mary to persecute the Protestants, and exultingly showed his commission, which he replaced in his bag; but as soon as he left the room the good lady of the house took out the commission, and replaced it with a pack of cards, with the knave of clubs uppermost; of course the Dean made a ridiculous figure when he opened his supposed commission at Dublin, in presence of the dignitaries; and before a

new one could be obtained, happily for the Protestants, the persecuting Mary breathed her last.*

Excursion to Eaton Hall,

The Palace of the Marquess of Westminster.

This splendid establishment is four miles from Chester, and our party drove to it in two cabs or flies, as they are often called here; they were large and heavy, far more so than our light vehicles in America. These English carriages, being well cushioned on all sides, and lighted by large glass windows, are both very agreeable and comfortable. As before remarked, in Liverpool they place four persons in them, and occasionally there is, as was the case to-day, an extra man on the box with the coachman. The carriage took six persons with one horse. They work their horses much harder than we do in America. The climate being more temperate, perhaps the horses are more hardy.

THE CASTLE.—We passed out of the city by the castle, the ancient seat of the Earls of Chester. It was originally built by William the Conqueror. The old castle was removed near the close of the last century, and the present grand edifice was erected; it is Grecian—is 103 feet long and 35 broad, and is surrounded by a fosse, 13 feet deep, cased with hewn stone.

Most of the buildings connected with the castle are massy and grand, and are in modern style. A garrison of some hundreds of soldiers is stationed there, and they were on parade to-day, as we drove by, presenting the usual brilliant appearance of British troops.

* Guide to Chester.

THE RACE GROUND, CALLED ROODEE.—This ground, covering 84 acres of rich meadow land, lies contiguous to the road. It is a beautiful natural amphitheatre, in a deep depression, surrounded by hills, by the city walls, and the river Dee, in the form of a bow arching outward.

The exterior circle, in which the horses run, is one mile and a half to two miles in circumference, and is separated from the general area within by a low circular mound of earth. The English gentry are very fond of the *turf*, and this is said to be second to none in the kingdom. In 1848, 156 horses were entered for the tradesman's cup, and 106 accepted, being the largest number ever known for one race, here or elsewhere.

Thirty-four horses started for the rich prize, which was won by a horse called Peep-o'-day Boy; he swept the stakes, amounting to 2,500 pounds,* more than 12,000 dollars.

EATON HALL, THE SEAT OF THE MARQUIS OF WESTMINSTER.—Passing the race ground, we soon arrived at the portal of the domain of the Marquis of Westminster, two or three miles from the palace.

As we drove up to the gate, an elderly man, of very respectable appearance, presented himself, and we asked permission to drive into the park. He civilly replied that it was not, at present, permitted, as the mansion was undergoing repairs. But upon my telling him that we had come from a far distant country, America, that we were in pursuit of knowledge, that this was our occupation at home, and was our sole object in Europe, he added, in a courteous manner, that, as we had come so far, we should pass. We drove on, mile after mile, before we reached the magnificent mansion. Through much of the territory every thing, except the road, and some occasional spaces, was in an unsubdued state, as much so as in an American wild, where the first forest had been cleared away,

* Guide to Chester.

and a new growth of smaller trees had arisen spontaneously. Perhaps this half-wilderness appearance was the result of design, for on both sides, beyond this double row of woods, there was a parallel extent of subdued and cultivated land, smooth with green sward, and on these fields, as well as in other parts of the vast territory, there were innumerable herds of deer grazing quietly, along with flocks of sheep, and they were not, any more than the latter, disturbed by our approach. Arrived at the mansion, we were very civilly conducted through the extensive conservatories and fruit gardens, which we found to be highly interesting and instructive. There were many flowering shrubs and plants, both exotic and native, in the warm glass houses; one was devoted to pine-apples, which were in healthful progress, and some of them were beginning to put forth fruit.

The orchideæ were numerous and flourishing. Being parasite plants of many species, they were growing in connection with suspended pieces of trees, and were depending from pots and from bunches of moss and peat. In the conservatories there was a beautiful contrivance for opening and shutting the glass, all at one movement and by a single effort of the hand.

There is a very extensive provision for wall fruit. Large areas, which might be called fields, are inclosed by high brick walls, upon which are trained, in the most beautiful manner, peach trees, pears, and I believe apricots, branching out like rays of light from a focus, and extending to a surprising length—so that, in some places, the branches would mount above the wall, were they not bent and made to take another and lower direction. It is thus, that here in England, in more than 53° of north latitude, six degrees north of Quebec, and even as high as Hudson's Bay, tropical fruits are matured in perfection, and those of our American climates are reared to a surprising degree of excellence. I remember that when I was in

this country before, I tasted at a dinner in London, the most delicious pine-apple that I had ever seen, and it was the production of an English hot-house.

The territory around the mansion was muddy, as there is in this climate much rain from the condensed vapor of the Atlantic, and our walks through the grounds were on that account rather inconvenient. The 20th of March, too, is rather an early day to expect dry ground in any northern climate, either in Europe or America. Even at the vernal equinox, and in this high latitude, the grass is of a rich green, the shrubs and smaller trees are in leaf, of this season's growth, and many more are in flower in the open air.

And now, what shall I say of this immense and magnificent mansion, built in the style of the modern Gothic, with numerous turrets, pinnacles, and towers. I have no tables of its dimensions, but presume that, with the offices, it cannot be less than 400 feet long. Drawings and pictures are necessary to make the elevation intelligible.

This palace, for it well deserves that name, is both grand and beautiful. The main front looks east towards the Dee, which flows through the territory; and the grounds slope downward from the mansion towards the river. They are laid out in ornamental forms, and are in good progress towards perfection, although there is still much to be done. It is obvious that when finished, covered by rich verdure, and decorated with the usual embellishments of English gardening, these grounds will be worthy of the palace which they surround and adorn. Urns, embossed with raised figures, are distributed here and there, and a small temple covers a Roman altar, dug up at Chester.

It is a square pillar of red sandstone, about five feet high, 18 or 20 inches in diameter, and the top is scooped out like a dish, probably to contain the things offered in sacrifice.

The Latin inscription on the side is perfectly legible. The altar is inscribed to the Nymphs and the Fountains, by the Twentieth Legion. "Nymphis et Fontibus Leg. xx—vv"—with the modest addition—"the victorious and invincible."

Eaton Hall being now occupied by artists and workmen, who are finishing and fitting up the apartments, we could not be admitted into the interior—but through the magnificent windows, which we were allowed to approach, we could see such apartments as were lighted by them. The furniture is removed, and we could catch only glimpses of grandeur and gorgeous embellishment. The front windows are very lofty, and adorned by painted glass; their cost was enormous. Eaton Hall is warmed uniformly by the circulation of hot water in tubes.

At the opposite ends of the vast portico, stand two large marble statues; one is an undraped female, and the other a knight in full armor. This villa is, I believe, not surpassed in magnificence by any one in England, and its noble master is said to be only the second in opulence—yielding, I presume, in this respect, to the Duke of Northumberland. The late Marquis of Westminster stood godfather to Queen Victoria at her coronation, and her eldest son, the Prince of Wales, is also Earl of Chester. We had to regret that it was impossible to obtain access to the library room, which is the largest and most magnificent apartment in the house, and contains a valuable collection of books and manuscripts.

There is here, beneath a glass case, a Torques—"a collar or chain of gold and silver, given by the Romans to soldiers who had distinguished themselves; they were wreathed with great beauty, and worn around the neck."* It is conjectured that this ornament might have belonged to Queen Boadicea, as it was found on the ground between Caerwys and Newmarket

* Craig's Universal Dictionary.

in Flintshire, where it is supposed a decisive battle between Agricola and Boadicea took place, in which the latter lost 10,000 men. An unhewn stone is believed to designate the grave of Boadicea.

Excursion in Wales.

CONWAY CASTLE.—We returned to Chester in time for the evening train to Bangor. We passed the magnificent ruin of Conway Castle; even in the twilight it was very grand in its hoary antiquity.

The following notices of it I derive from the *Cambrian Mirror*:

Conway was surrounded by lofty walls, with a circuit of a mile and a quarter, in which distance there are twenty-one strong towers, and at each of the three entrances to the town there are two more, still stronger.

The castle stands on a bold, projecting promontory. The external line of the fortifications contains eight lofty towers, each crowned with a slender, elegant turret. The grand hall was 130 feet long, and 30 wide—the roof being supported by eight noble arches, four of which still remain. The view from the top of the battlements is most imposing, and it is a grand and solemn ruin. Tennant, in his *Picturesque Tour*, says—"a more beautiful fortress never arose. It is a castle of matchless magnificence."

It was used as a fortress nearly 400 years. When garrisoned by Charles I., it was taken by the Parliament forces, Nov. 6, 1646. The castle being granted to the Earl of Conway, he despoiled it of its iron, lead, timber, &c., to be transported to Ireland, but as a just retribution for his avarice and sacrilegious spoliation, the vessel was wrecked, and all the plun-

dered treasures were lost. Although we were not able to visit Conway, we saw enough, in our rapid transit, to justify the preceding citations, and to fill us with regret that we could not arrest the flight of the train, and wander over this stupendous ruin, one of the great works of Edward I., constructed to secure the submission of Wales. We were soon, however, to receive compensation, by the view of another castle, still more magnificent.

BANGOR STATION, March 21, 1851.—*The George*, House of Mrs. Roberts.

It was quite dark when we arrived at the station, where an omnibus was waiting to carry us a mile and a half to the George, the well-known inn of Mrs. Roberts. This lady, in the active period of life, and being evidently a capital manager, deserves honorable mention. Our large party were promptly accommodated with apartments. Our bedrooms were clean and well-furnished, while a neat parlor, a blazing hearth, and comfortable repast, gave us that feeling of home which comes naturally over the traveller, when his day's work being done, he seeks repose and comfort, and finds them, as we did now, accompanied by a frank and kind reception, as if we were visiting friends, who were entitled to be received with cordiality.

MENAI STRAIT.—Morning broke upon us in a beautiful rural retirement; country scenes surround the George Hotel, and the front of the house looks out upon the Menai Strait, which separates Wales from the Isle of Anglesea. It is to the eye a beautiful river, half a mile wide; the tide rises 20 to 25 feet, and through this narrow strait it rushes with great rapidity.

POSTING.—As we were now out of the track of railroads, and were about to make a circuitous ride among the mountains of North Wales, we found it necessary to travel post, and Mrs. Roberts promptly arranged our equipment, which was a coach and four horses, with two postilions—one for each pair of horses. The carriage was good, the horses active and well-

trained, and the postilions vigilant and civil. They were dressed in blue short jackets, white corduroy breeches, and white top boots, with spurs.

THE BRIDGES.—Our principal object in travelling to Bangor was to see the two famous bridges, the *Suspension Bridge*, and the *Tubular Bridge*, both over the Menai Strait, to connect the Island of Anglesea with Wales.

Both these bridges are in sight from the George Hotel, and in sight of each other, and the Suspension Bridge is very near to the Hotel.

THE SUSPENSION BRIDGE.—While our party were arranging their affairs, I went forward with my son to the Suspension Bridge, and walked upon it a distance sufficient to enable us to observe its structure. When it was finished in 1825-6, it was deservedly esteemed one of the wonders of the world, and it is still entitled to hold that rank. It is indeed a stupendous structure, of which the full details may be learned from the official reports; the following are among the principal facts: It is 100 feet above the water, so that the ships, even those of the largest class, are not impeded, and can pass under it without lowering a sail or a spar. The bridge is built out upon arches from both sides of the river, to a certain distance, leaving the space between the points of suspension 560 feet. The platform is about 30 feet wide. "The whole is suspended from four lines of strong iron cables, by perpendicular iron rods, five feet apart. The cables pass over rollers, on the tops of pillars, and are fixed to iron frames under ground, which are kept down by masonry. The weight of the whole bridge between the points of suspension is 489 tons."

The massy materials of which this bridge is composed—the admirable manner in which they are locked together—the great elevation at which it crosses this grand strait—its persistence without sign of failure during more than a quarter of a century—its importance, as a connecting link between England

and Ireland, and the result of this early effort to conquer formidable physical difficulties, fill the beholder with admiration and delight, and do lasting honor to *Mr. Telford*, the distinguished architect.

THE TUBULAR BRIDGE.—This structure, one mile S. E. of the other, is still more wonderful. To construct a vast tube of iron, strong enough to admit of railroad trains passing safely through it—to build it in separate pieces down on the common level, to float them to the site, and raise the pieces to an elevation of 100 feet—place them upon firm pillars of masonry as supports, and then to unite them into one continued tube as a part of a grand railroad connection, between London and Holyhead and Ireland, is an achievement which must for ever place the name of *Robert Stevenson* above all praise.

From our carriage we had a distinct view of this magnificent structure as we passed very near it, but a driving rain storm, which came up suddenly, prevented our going into it, as we did into the other. The following statements I copy from drawings and plans of the bridge that lie before me.

Length of long tubes, 460 feet each.
Weight of “ “ 1800 tons.
Weight of iron in the tubes, 10,000 tons.
Length of short tubes, 230 feet each.
Weight of “ “ 700 tons each.
Total numbers of rivets, 2,000,000.
Total length of the bridge, 1,834 feet.
Width of each of the centre spaces, 460 feet.
Height of rails above high water, 104 feet.
Height of the Britannia Tower, 221 feet.

An enormous weight of between three and four hundred thousand pounds caused a depression of the level only three inches. The ordinary pressure of the railroad trains produces a depression of one-eighth of an inch, or less, discernible only

by instruments. A pressure of more than 600,000 pounds produced a deflection of 1.47 inch.

As works of art, these bridges are triumphs of mechanical skill and science, and they not only establish the connection which has been named between Wales, Anglesea and Ireland, but they afford the prospect of a still more important connection, from Galway, in Ireland, to Nova Scotia, by steamers, thus bringing Europe and America within a week of each other.

The most massy stone pier, the Britannia, was erected upon a firm rock which is in the middle of the river. The term tube may convey an erroneous idea; instead of being round, it is square. It is an immense iron corridor, or parallelopiped closed in, forming a horizontal iron gallery, or passage in which the rails are laid. It is 30 feet high in the middle, and 22 feet towards the ends. This stupendous structure proves to be a very delicate thermometer. A little sunshine raises the centre an inch (as the expansion cannot extend downwards), and produces a horizontal deflection or swelling of an inch and a half.

For every 15 degrees of Fahrenheit it expands 0001 or $\frac{1}{10000}$ of its length, or half an inch. Alternate sunshine and showers of rain cause the tubes to expand and contract. If one of the tubes was placed on end in St. Paul's Churchyard, London, it would rise 107 feet higher than the top of the cross. (Cambrian Mirror.)* The rivets that unite the plates are an inch in diameter; they are put in red hot, and beaten with heavy hammers, and in cooling, they contract so strongly as to draw the plates together with a force that requires four to six tons to make them slide on each other. The tubes were raised from their position afloat on the water, by means of a Brahmah hydraulic press, into which the water was injected by powerful steam engines.

The force exerted by this power would throw water nearly

* For all the important details, this valuable Tourist's Companion in North Wales, may be consulted.

20,000 feet high; more than five times the height of Snowdon, the highest mountain in Wales, and almost 5000 feet higher than the summit of Mont Blanc. The greatest number of men employed at any one time on this bridge was 2000, and the fatal casualties were seven. The second tube was floated to its place Dec. 4, 1849, and the opening of the bridge by the passage of cars took place March 5, 1850. It may be deflected 13 inches without injury, and would bear a weight of 1000 tons.

Ride to Caernarvon and Llanberis.

While we were looking at the Suspension Bridge our carriage came up, the horses in fine spirits, and our young friends delighted with the position which they had all taken on the top of the coach; the baggage (not a small amount) being placed inside, and serving as ballast. Having been accustomed, when in Britain before, to take this giddy seat, I did not hesitate to join my younger friends; and now we were anticipating much pleasure from the fine views of scenery in a bold, picturesque and beautiful country; but we had not long enjoyed our exalted position, nor proceeded many miles when a tempest of black clouds, gusts of wind, and powerful showers of cold rain dissipated our romance, and for myself, I retired among the baggage, while the rest of the party, including the ladies (who are wont to be brave on such occasions), rode out the storm; but we were all glad to take refuge for a short time in a cottage by the roadside, until some adjustments of apparel could be made.

The climate is eminently fickle, and before our day's ride was through we encountered squalls of rain and hail, while a wintry wind descended ice-cold from Snowdon, and the mountains of that group, which were covered with snow.

The western side of the British Islands receiving the aqueous vapor blown by the prevailing westerly winds from the Atlantic Ocean, and having high, and of course cold mountains, the vapors are condensed, and fall in rain, hail and snow.

CAERNARVON AND ITS CASTLE.—Nine miles brought us to the ancient town of Caernarvon, where we stopped to dine. While dinner was preparing, we visited the Castle, founded by that stern warrior, Edward I., the conqueror of Wales, and finished by his son, Edward II. Like Conway Castle, and other strongholds in various parts of the principality, it was built as a part of the means of preserving the English dominion over a brave but subjugated people.

It is a stupendous ruin, and even now, after lapse of almost 600 years, it is magnificent and imposing beyond any thing that exists in Britain, and perhaps in any other country. Sketches may be obtained in the village, which will convey a tolerable idea of its present condition; but to obtain a full impression of its grandeur, it must be seen. Its material is limestone, and the arches and windows are of sandstone.

The works cover three acres of ground. The walls are from eight to ten feet thick, and they include a gallery or covered way, with loop-holes for the discharge of arrows. Numerous towers crown the walls. They have five, six and eight sides. The largest is called the Eagle Tower, and it has three beautiful turrets. This we ascended, and from it we enjoyed a grand prospect over the Menai Strait and the Island of Anglesea and Wales, with its mountains. We ascended several of the towers by spiral stairs of stone; the hollows worn in them by human feet bear witness to their antiquity, and to the full garrisons which have occupied this strong fortress; strong against the means of attack before the invention of cannon.

All are gone down to the grave; architects, builders, assailants and defenders, and the generals and monarchs by whom

their action was stimulated. There are a multitude of apartments, and excepting roofs and floors, they are in such a state of preservation as to evince that the work was thoroughly done. Having been constructed 200 years before the invention of gunpowder, there are no embrasures for cannon, but the loopholes for arrows might serve equally well for musketry.

The well is still perfect and abundantly filled with water; the holes and passages for lead tubes to convey the water are visible, and portions of the metal are still in place, although cupidity has taken most of it away.

REPUTED BIRTHPLACE OF EDWARD II.—We visited the room where Edward II. is said to have been born, and at the opposite end of the castle is the gate called that of Queen Eleanor, because tradition says that she entered there previously to her confinement, which her husband was solicitous to have happen in Wales, and in this castle, that the Welsh might be more contented under a native-born prince. The room said to have been signalized by that event, is in the Eagle Tower, and like that in which James VI. of Scotland, and I. of England, was born in the Castle of Edinburgh, is small, although it might have been comfortable.

Recent investigations have, however, proved that the room assigned as the place of Edward's birth, could not have been the real one, for that tower in which it is, was not then built; but it is not improbable that the event might have happened in some other apartment in the castle. April 25, 1284, was the birthday.

This castle was at times the residence of the court, and the great rooms of state still show their walls little impaired by time, for the stone work in the interior, away from the weather, is, in general, very perfect. The grand entrance to the Castle was beneath a massy and lofty arch, in which are still visible the traces of the grooves of four portcullis, while some of the staples for the hinges, and the fastenings of iron, remain.

The castle is uninhabited, except by the family, who act as attendants to visitors, and their head, a veteran in the English wars, entertained me with stirring incidents of his perilous life.

We looked into the dungeon, a horrible pit, which is 80 feet deep, dark, damp and dreary in the extreme; a place where mercy seems never to have entered.

The castle has been taken and retaken several times, in different wars, and has been used as a place of confinement for state prisoners. Its broken walls are festooned with ivy; as we walked among them, the winds howled mournfully through the empty halls and towers, while the rooks, now undisputed tenants of this seat of ancient strength and grandeur, scaled unconsciously around, flapping their sable wings and disturbing the air with their discordant notes.

The town of Caernarvon was formerly an important place, and is still a port of some consequence on the Menai Strait. It contains about 5000 inhabitants, and is a favorite resort for tourists and lovers of rural scenes; a resort which is much increased since the construction of the great bridges.

There were many other Castles in Wales; a people so brave and possessing a country having such formidable natural defences, were subdued and retained in subjection only with extreme difficulty.

In the vicinity of Caernarvon was a famous military station of the Romans, called Saguntum.

From scenes connected with ancient wars, although invested with a pensive but romantic interest, we gladly turned to the scenes of nature, ever delightful and ever new.

RIDE TO LLANBERIS, from Caernarvon Castle (a name which we can never hear without interesting recollections); we pursued our journey through a charming country to Llanberis. The scenery was, in the early part of the ride, mild and very beautiful. The fields were highly cultivated; green hedgerows attended us nearly all the way, and the roads were excellent.

As we advanced, however, stone walls began to appear, often covered with turf; distant mountains were invested with clouds alternately rolling up their sides in thick volumes of condensed vapor, or flitting over their tops and borne off by the wind, while snow appeared here and there upon the peaks and ridges. The air remained very cold, but the greater number of our party preferred remaining upon the top of the coach, to enjoy the sublime view of the Welsh mountains, the Alps of Great Britain.

As evening approached, and we continued to travel onward upon a road still excellent, it was narrowed by mountains, closing in both sides with precipitous cliffs; we wound along the beautiful mountain lake of Llanberis, only 2 or 3 miles long, and half a mile wide, with its crystal water, in many places 150 yards deep; and its narrow and tortuous sheet, ending in a rivulet of discharge, attended us to the end of our day's journey. There are two contiguous lakes at Llanberis; both together are hardly equal in extent to Saltonstall's lake, near New Haven, in Connecticut, and the latter wants only the Welsh mountains near it instead of the trap-hills, to be equally romantic, for it has long been a favorite resort both for the beauty of the scenery and for the fishing.

Near the end of our ride, the road was in some places built up with stone walls from the edge of the lake of Llanberis, and piles of rude rocky cliffs confined it to a single track, merely wide enough for two carriages to pass each other. Stone walls which had been growing prevalent, now become exclusive, hedgerows having disappeared. The aspect was in this respect like that of New England, although it was more rude and forbidding than any thing of the kind I have ever seen in any part of my native country.

The cultivated land diminished in extent as the rocks and mountains increased, but all available places, even up the slopes of the mountains, were either in grass or under cultivation.

White houses and cottages decorated the slopes of the hills, and it is not obvious to the traveller how the people can subsist in such a country ; but I suppose the problem is solved by the immense slate quarries, in the midst of which we have now arrived.

QUARRY OF SLATE.—Welsh slate is famous all the world over, and we visited a quarry near our hotel, where the slate is extracted from the sides of the mountain. Here 2000 men were employed in blasting, splitting, selecting and transporting the slates. As the successive blasts (and they occur frequently) were let off,* the reports were reverberated from mountain to mountain, echo adding to their number, until they died away in the distance. The sides are covered by immense piles of broken and refuse slates, rising almost to their summits ; the mountains appear to be 2000 feet or more in height, and as the ruins rise, at a high angle of elevation, probably often 45 degrees, the slates, moved not only by gravity, but by the concussion produced by the blasts, frequently slide down with a peculiar rustling noise. The slopes are divided by flat terraces, on which the slates are moved upon rails, in hand cars, which transport them to a slide, and down this they are conveyed by a stationary steam engine, that allows them to descend at a regulated speed, and thus the brittle slates are landed safely below, without fracture. Here they are received on railroad cars, and are transported by locomotives, puffing and snorting along the mountain passes, 8 or 10 miles, to Caernarvon, for exportation from that port on the Menai Strait.

It is said that the income of these quarries is one hundred thousand pounds per annum ; thus they are mountains of

* A horn, once in 20 or 30 minutes, gives notice to the workmen to retreat to their coverts, and another horn recalls them to their work ; thus the fatal accidents, which were formerly frequent, are prevented.

wealth, more valuable than the gold mines of California and Australia. The use of slate in architecture, and the arts, has greatly extended of late years; large and massive pieces being wrought into billiard tables, bathing and washing structures, ornamented mantle-pieces, &c., as all will remember who witnessed the great Exhibition in London.

There is another slate quarry at Penryn, near Bangor, which employs 2500 men, and 250 tons of slate are shipped daily, at a port six miles distant. In Wales, the slate is appropriated to various economical uses besides roofing. It is wrought into chimney pieces and columns, and resembles black marble, without its polish; inkstands, also, and various utensils are made from it; and it is employed in large sheets to cover the sides of houses. The hotel where we lodged, was covered in that manner, and the pillars of the house were constructed of it.

Slate is the great staple of this region; its bleak mountains will for ever afford an inexhaustible supply. Their dark frowning precipices give a bold and picturesque outline to the landscape, and the mountains that are quarried for slates, excavated, as they are, by incessant blasting and splitting of their solid strata, present a scene of ruins peculiarly wild, and invested with a gloomy grandeur. This appearance was particularly impressive as evening twilight began to curtain in obscurity, the lofty slate mountain near the lake of Llanberis; its dark top rising above its wounded sides, formed a bold relief against the distant sky, while its shaded quarries, wild and dark, resounded with explosions that shattered still more its eviscerated bowels, and threw out clouds of smoke into the air.

GEOLOGICAL CHARACTER OF THE WELSH SLATE.—In the language of former days, it would be called primary slate, and to the eye, it appears like the slate of the Woodbridge Hills, near New Haven—like that of Dummerston, in Vermont, and Bangor, in Maine. No great confidence is, however, any

longer reposed in those earlier divisions, except as simply implying a chronological order. Like the slates in the American localities just cited, these in Wales abound with veins of quartz and with epidote. It is probable that the division of the slate, both in the laminæ parallel to the cleavage, and oblique to, or at right angles with it, is structural, and dependent on polar forces; while the proper bedding or stratification, and the elevation and the position of the strata, whether vertical, horizontal, or inclined, depend upon the general laws of geological dynamics. I had supposed that these Welsh slates contained no organic remains, but in an interview in London with Sir Roderick Impey Murchison, the distinguished author of the *Silurian System*, founded on his own profound examination of the geology of Wales during many years, I learned that these very slates of Llanberis are fossiliferous—containing marine shells—and, therefore, they are of aqueous origin. The geological reader will find a description, with figures, of all the Welsh fossils then known, in Sir Roderick's magnificent work.

THE ROYAL VICTORIA HOTEL.—In this region of desolate mountains—winter on their summits, and cold winds sweeping down their sides—it was grateful to weary travellers to find a comfortable home, cheered by kind and courteous manners. Such is the Victoria Hotel, which was erected by T. A. Smith, Esq., the proprietor of the quarry. The house is large and convenient, and is neatly figured in the *Cambrian Mirror*, in its position at the foot of the mountains, and near the lakes; a delightful, romantic retirement, with fine air and excellent trout. The house was named in consequence of a visit, in 1832, from the then Princess Victoria, and her mother, the Duchess of Kent. The room in which they slept was occupied by members of our party.

If we republicans are disposed to smile at the great attention paid, in this country, to all movements of the royal family, and of other distinguished individuals, I believe, if we are

candid, we shall find that it springs from a principle inherent in our natures, and we at home are not negligent of such associations.

Partaking of American feelings, I have seen, with interest, in Boston, the house where Franklin was born; in Fredericksburgh, Virginia, that where the mother of Washington lived, and that in which her glorious son himself lived and died, at Mount Vernon; and our country is full of similar associations, with the memory of the great, the wise, and the good; and *so let it be*; it is a human feeling which should be respected and cherished.

DOLBADARN CASTLE.—We visited the ruins of an ancient castle, called Dolbadarn. It is on a high hill, overlooking the valley, and the entire pass of Llanberis is visible from it. It is a small structure of its class, being only twenty-five feet in diameter and seventy feet high.

Its history is obscure. "Owen Goch, brother to Llyweyn, last prince of Wales, was imprisoned here upwards of twenty years, for having joined in the rebellion against his brother."

Departure from Llanberis, and Passage through the Mountains.

March 22.

It was necessary for us to travel by post again to-day. As we were to encounter a considerable ascent, we took, as yesterday, a coach and four for ourselves, and a second carriage with two horses for our baggage. At the distance of five miles we reached the summit, when we dismissed one pair of horses, to be returned by the post-boy, while, having now mainly a downhill road, we proceeded with the two remaining pairs. Our successive changes of horses were at Capel Carig, thirteen miles; again at Pentrevoiles, fifteen miles; again at Corwin, fifteen

miles, and ten more brought us to Llangollen. It is impossible that any description should do justice to the sublime and beautiful scenery on the route through which we passed this morning. The first five miles led us through a narrow gorge in the mountains, where they rise abruptly from two to three thousand feet on each side, dark, rugged, and precipitous, their summits wrapped in clouds, or capped by snow, and their sides covered with massy ruins, that, in the course of ages, have fallen from the cliffs and peaks. Some of the fallen masses are of enormous size, and others are impending to their fall.

On some of the mountain peaks, detached rocks were seen in giddy positions, where a small force might throw them down. So grand were the scenes through which we were passing, that, although the air was that of winter, most of the party preferred to shiver on the tops of the carriages rather than to lose the grandeur of these mountain passes, which, as it was a hard pull for the horses up hill, we had full time to survey.

It was thought by some of the party that on the slopes of the rocks, there were marks of glacial action, but we could not stop to examine; from what we afterwards heard in a discussion in the Geological Society, in London, we found that these impressions were correct. The mountains among which we were travelling, are called the Snowdon Group; but there is one mountain, Snowdon proper, which is more than 3500 feet high above the ocean. It is pre-eminent above the rest, and was in view in the distance, although its top, in common with many more, was involved in clouds and vapor, driven by fitful gusts of wind, with occasional dashes of rain. These mountains, so near to the ocean, and so well prepared, both by position and their cold temperature, to condense the vapors borne to their sides and summits by the western gales, are frequently visited by storms and tempests. We did not attempt the ascent of Snowdon, both because the weather was thick and

us propitious and the mountain snow-covered, and because we expected to ascend the more lofty Alps and Apennines.

The gorge of Llanberis, through which we had now passed, is one of great geological interest. It records distinctly the effects of the forming, elevating, and disrupting forces, which have produced its present aspect of wild and ruinous sublimity; it is a scene of savage, desolate grandeur. There is not a single tree to veil the rocks, and there is scarcely any verdure or any living animal. We did indeed see a solitary goat high up among the cliffs, on the side of a mountain, and it was equally difficult to conceive how he arrived in his perilous position, or how he was ever to escape from it. The mountain scenery, as we proceeded, grew somewhat milder, but it was still very grand. As we descended, beautiful verdant valleys began to appear here and there. Many sheep were seen, but their fleeces appeared like long hair, and extremely abundant; cattle, also, became numerous, and among them the native black cattle of Wales were seen here and there. The roads were wonderfully fine, and evidently because they had been thoroughly made in a very difficult country of rocks, and deep and rugged defiles.

The road, constructed with admirable skill and fidelity, and being bounded on both sides by a high and strong stone wall, laid in mortar, or by a natural barrier, it affords perfect security where it is much needed, as it often passes along precipitous cliffs, and is occasionally cut out of the mountain, when, of course, the parapet wall is needed only on one side. Indeed, the road is perfect; it is entirely smooth and hard, and we could not conceive that it could be surpassed in any part of the world, and such were our impressions after we had seen the best roads in the most improved countries of the continent. This is a part of the great road between London and Holyhead, in Anglesea; it passes over the suspension bridge of the Menai Strait.

In our progress, we came to a very fine agricultural country. Grand mountains and hills, indeed, never deserted us, but, among them, were magnificent valleys, with rich and well cultivated farms.

Riber Dee—Corwin—Welsh Harper—Fine Scenery.

The country became eminently beautiful as we crossed the Dee, now swollen with rains, and foaming, along with a rapid and noisy current, as we entered the ancient town of Corwin, famous in Welsh story. It was here that the Welsh assembled those armies which were defeated successively by both Henry II. and Henry IV., of England.

A WELSH HARPER.—The afternoon was bright, as the sun shone out after rain, and as we were now in the heart of ancient Wales, while we were waiting for our horses, it was a very pleasant circumstance to hear the native minstrelsy of the true descendants of the primitive Britons, whom the Roman power could never subdue.

A harper of a very respectable appearance, apparently about fifty years of age, presented himself at the door, and we invited him into the parlor. He had a very fine instrument, and performed several of the wild and touching airs of his country, in a manner which drew money from our pockets, if not tears from our eyes.

From Corwin to Llangollen our ride was rapid, and led us through a splendid country, upon which our epithets of warm admiration were so often lavished that our vocabulary was exhausted, and if silence ensued, it was because we could say no more. We had no conception of so beautiful a region in Wales, and our impressions were the more vivid because its

extreme beauty was so strongly contrasted with the wild sublimity of the pass of Llanberis.

Let off 1.2.2 - 7m 2.3
 Vale of Llangollen.

We arrived before evening in the beautiful and celebrated vale of Llangollen, and it was in our plan to pass our Sabbath quietly here; the first that had occurred since our landing, and the engagements of an active week made repose and religious observances the more acceptable.

Our Hotel—a comfortable, but unpretending place—was contiguous to two interesting objects, an ancient Welsh church and the still more ancient river Dee, which flowed at the very door of our abode.

SABBATH MORNING, AND A WELSH CHURCH. *March 23.*
 —We awoke in Llangollen. A week before we passed the Sabbath on the English and Irish channels, and now, far away from the agitations of the sea, our harmonious family party were pleasantly established in our temporary home.

The morning was rainy, but we had not far to go to the church, which was divided from us only by a small cemetery, now full of the memorials of the dead. We entered the church, which is a plain, ancient structure, semi-Gothic; the ceiling is ornamented with carved oak, and there are some pictures of stained glass.

The morning service was in the native Welsh language, of which the Amen, pronounced by the Clerk with great emphasis, was the only word that was intelligible to us, although we could follow the responses by means of a prayer-book in Welsh and English; the singing was melodious, the aspect of the people serious, and it was very pleasing to observe remains of the ancient Welsh language preserved in the primitive worship and

faith of a people who were christianized very early, who contended long and bravely for their liberties, who were cruelly oppressed by their more powerful neighbors, and were therefore excited to vindictive retaliation. It is however happy, that all the kingdoms, anciently existing in Britain, are now united into one; past wrongs, on all sides, are forgotten, and there is no longer a frontier stained with blood, nor devastated borders, nor a murdered population. In the afternoon, the service, which was episcopal, was performed by the same clergyman as in the morning, and the same clerk and singers gave their attendance. The Vale of Llangollen (pronounced Llangollen) is exceedingly picturesque; a combination of the grand and beautiful in endless variety. The river Dee, with its numerous turns, is an important feature in its scenery, winding, as it does, among lofty hills, and being at present, as already remarked at Corwin, much augmented by rain, it rushes by our hotel with an impetuous and turbid current. Its course, as it passes Llangollen, is soon reversed, when it returns, and discharges its waters at Chester. It is rich in salmon, trout, and other fish.

This valley has been famous in Welsh history. It was the residence of their great champion, Owen Glendower; it contained an abbey, and several castles crowned its high grounds.

Plas Newydd, and the Ladies of Llangollen.

This vale has been rendered famous by having been the chosen residence of two ladies of noble families, and of Irish extraction, who, for half a century, imparted celebrity to Llangollen. They are here no longer; we saw their tombs in the cemetery, and perused the brief memorial of their life and death.

PLAS NEWYDD was the name of the "antique and unique cottage of the late lamented Lady Eleanor Butler, and the Hon. Miss Sarah Ponsonby. It is situated on a small knoll, surrounded by lofty trees and beautiful grounds. These two ladies came into this neighborhood in 1778, and being pleased with the scenery, they made it their philosophical retirement from the frivolities of the fashionable world, from which, and from their friends, they literally eloped. They built their romantic cottage, and decorated it with palisades, ornamented with grotesque and antique figures carved in oak, in a most peculiar style. Lady Butler died on the 2d of June, 1829, aged ninety. Miss Ponsonby died on the 9th of December, 1831, aged seventy-six. Both were interred in the church-yard at Llangollen. Plas Newydd is now the property and residence of two other maiden ladies, Miss Lolly and Miss Andrew, who seem to tread the paths and emulate the retirement of their predecessors. By permission, obtained through the courteous intervention of another lady, I was permitted, with my son and his wife, to see the house and the ladies themselves, and their beautiful grounds. The house is a gem, and in the enjoyment of it, the ladies, Butler and Ponsonby, from attachment to each other, refused advantageous offers of marriage, gave up the world, and lived here for more than fifty years in elegant retirement in the exercise of benevolence and hospitality."

They saw at their house the most celebrated literary characters of the day—Madame de Genlis, Sir Walter Scott and others of his scale of fame—and the ladies of Llangollen contributed to the fame of this justly celebrated vale quite as much as its grand and lovely scenery. They were ladies of accomplished minds and manners, and doubtless their relinquishment of their friends, and of the world for each other, added a degree of romantic interest to their quiet abode, nor were they without some harmless, although rather amusing peculiarities of costume.

Prints are sold in Llangollen, not only of Plas Newydd, their beautiful house, but of themselves in the somewhat masculine attire which they chose to assume. They are represented in full riding dresses, such as were formerly made of broadcloth, close fitted to the waist, and with an ample skirt, and they wore round hats, with high crowns, I suppose of beaver, such as are worn by gentlemen. As they were of full habit of health, this costume did not tend to feminine delicacy of appearance, and they might have been taken for men in disguise. The present possessors of the house kindly accepted our apology, as strangers from a far country, for the liberty we had taken, and we were cordially received. One of the ladies, although it was evening twilight, and the earth wet with recent rain, attended us through the grounds, which are most beautiful. Forest trees and fruit trees, and trees and shrubs for ornament; rich and well-trimmed hedges; varied surface of gentle hill and grassy slope; and in the remote and retired distance, a rivulet and waterfall; near the dwelling, domesticated birds of cheering song and elegant plumage, and in the lofty trees the clamorous rooks; all these attractions were grouped into a harmonious variety, while in front of the domicile was the beautiful vale and the rushing Dee; and upon a high hill beyond the river the shattered but still imposing ruins of the old castle of Dinas Brann, whose mouldering walls tell of a thousand years gone by.

The apartments of Plas Newydd are not large, but they have a charm from the curious relics of antiquity, and productions of art by which they are adorned, as well as from association with the memory of the departed ladies. The ancient oak, carved in great profusion of figures, crowded into panels, staircase, hall-passage, doors, mantels, and ceiling, are venerable for association, and interesting from their titled donors. One door is from the Prince of Prussia, this from Valle Crucis Abbey, &c.; for the carved figures are antiques, taken chiefly from celebrated ruins of abbeyes, castles, and palaces of the

olden time, and age has given it a deep and sombre hue. While receiving the kind courtesies of the present occupants of Plas Newydd, we could easily associate its unchanged appearance with its late celebrated possessors, the ladies of Llangollen.

Castell Dinas Brann.

We will not descend from Plas Newydd without looking again across the vale and over the Dee at one of the most ancient of the castles of Wales. Although its exact era may not be known, it is associated with names and events memorable in Cambrian history. The name is said to have been derived from Bran Fendigaid, or Bran the Blessed. He was sent to Rome as a hostage for his son, Caractacus, who, although he bravely defended his country of South Wales (Siluria) against the Romans, "was at last defeated and led in triumph to the emperor, Claudius, then at York, where his noble behavior and pathetic speech obtained for him his liberty, A. D. 52."

Bran, the father, and his family, being at Rome during the time of St. Paul's first imprisonment there, he is reported to have brought back the Christian faith to his country, and, therefore, was named Bran the Blessed.

Castell Dinas Brann was a place of great importance in the wars of Wales; it was often an asylum of safety, as it covered nearly the entire summit of a precipitous and almost inaccessible hill.

The castle was 290 feet by 140, and although the hill is more than 900 feet above the river at its foot, its two wells were never known to be without water. The castle is now very completely a ruin, only a part of its walls is standing, but from every view it presents a very picturesque and striking object.

Abbey of Valle Crucis.

Among the interesting objects in the Vale of Llangollen, the Abbey of Valle Crucis, two miles from the village, is conspicuous. It is an interesting ruin, and a portion of its walls is in good preservation. It is believed to have been founded about the year 1200, and was suppressed in 1535, by Henry VIII.; being, as is said, the first Welsh monastery which was plundered by his insatiable cupidity. This abbey was situated in a lovely, secluded valley, and it is still beautiful with verdure, trees, and shrubs, along the river Dee, near which the abbey rises, a venerable ruin, but still imposing and grand; a silent historian of scenes and events long past. The front wall, in the form of a Gothic temple, is nearly entire; even the slope of the walls that sustained the roof is preserved, although mantled with a profusion of vines. The principal doorway is also entire, with a fine Gothic window above (the glass of which is at Plas Newydd), and parts of the wall at the remote end of the building, 180 feet distant, are still standing. The intermediate space is filled with the ruins, which are now covered with grass, having the consistency of turf. The abbey is supposed to have been in perfect order 350 years ago, and but for ruthless violence, might have been so still. A portion of the chapel is remaining, and in a well in a cloister, was a double benetoir, or baptismal font, a marble basin, which is still perfect.

A large portion of the materials of the abbey has been removed for building, and a farmer lives in a modern lodge near at hand constructed out of these ruins. Finely carved Gothic ornaments are plastered into the walls of the barn, or project into the hay-loft. Recently, eleven skeletons of men were discovered here, being the only human remains that have been

found on the premises, and they are supposed to designate the place of the cemetery. The monks are reported to have lived luxuriously, with abundance of viands and wines; this may have been true, but those who were destroying their establishment, would, of course, give no favorable report of their morals.

THE PILLAR OF ELISIG was erected in this valley 1200 years ago, to commemorate an early chief. It was originally 12 feet high, but was thrown down and mutilated by the barbarism of Cromwell's soldiers. The part that remains is 7 feet long. It was re-erected a few years ago, and is still visible a little way from the abbey. It was originally covered with inscriptions.

THE BRIDGE OVER THE DEE is a beautiful structure, arched with stone, massive and yet graceful. It has already stood 500 years, and may as well last for 1000 more.

It is worthy of remark that we were very favorably impressed by the courtesy and intelligence of the good girls, our guides, both at Caernarvon and Valle Crucis.

Llangollen to Chirk Castle, with the Bridges.

March 24, 1851.

Again in our post carriages on a bright day, with a cheering sun, and a buoyant, elastic atmosphere, we drove out of the splendid vale of Llangollen, delighted with its grand and beautiful scenery, combining the features of lovely valleys and rich farming lands, with picturesque hills, bold mountains, and venerable ruins.

A few miles brought us to the two magnificent bridges which cross the valley.

THE VIADUCT which sustains the railroad that passes from London to Holyhead, is 1531 feet long; its height is 148 feet;

the number of arches, 19, and the intermediate spaces 60 feet. It was two years and a half in building, and cost £72,346. It spans the Dee and its valley. When we descended on our feet to the level of the foundation, and looked upward beneath the arches, the impression was very strong, and almost made us giddy.

THE AQUEDUCT BRIDGE is a work which, if not equally stupendous, is still entitled to be regarded as one of the wonders of the age. It conveys the Ellesmere canal over the vale, an extent of 250 yards. It has ten arches, resting on pyramidal piers of stone, which are 65 feet in the centre. It was constructed by Mr. Telford. Two of the wonders of modern engineering are exhibited here: a railroad and a canal passing high in the air, each on their own magnificent arches.

It is remarkable that several of the greatest engineering works of Great Britain are in this region of Wales. The Menai Suspension Bridge, the Menai Tubular Bridge, the Viaduct, and the Aqueduct Bridge.

The Menai Tubular Bridge, and the Viaduct Bridge, mentioned above, when undertaken, were both supposed to be impossible, but science and art have triumphed, and probably the limit of their powers in this branch of engineering has not yet been reached.

Chirk Castle.

Interesting objects are very near to each other in this remarkable region. We had only satisfied our eyes with gazing at the magnificent Viaduct and Aqueduct Bridges, when we arrived at the opening of the park leading to Chirk Castle, one of the most perfect of the feudal fortresses.

We approached it by a private road of half a mile, through the domain. The grounds are laid out very much in the style

of the modern English parks. A smooth lawn of green sward, adorned by numerous and stately beech-trees, rose by an agreeable swell, until we arrived at the castle itself. It has an air of gloomy grandeur—serene, and majestic in its vast walls of gray stone, forming a quadrangle of 250 feet on a side. It is not a ruin, but is in perfect repair; it is an authentic presentation of a palace and a fortress combined, such as baronial chiefs constructed for their own security and accommodation, and too often for the annoyance of their neighbors, long before gunpowder, or the art of printing was discovered; long before America was dreamed of, and when fighting and feasting were the chief employments of nobles as well as kings.

Chirk Castle stands on a commanding eminence, affording rich and extensive prospects from the walls and towers. It is believed to have been founded in 1011, before the Norman conquest, and if this date is authentic,* it is 840 years old, nor is this the most remote date of the structure, for it was erected on the foundation of a castle still more ancient.

In the progress of events, reaching through so many centuries, it has, by inheritance, by sale, by attainder, and confiscation, passed into the hands of numerous possessors. Henry VIII., to whom nothing was sacred, caused the proprietor, Sir William Stanley, to be executed, and gave the castle to his natural son, Henry Fitzroy, Duke of Richmond and Somerset; and after his death, Queen Elizabeth gave it to her favorite, the Earl of Leicester. "After his death, it became the property of Lord St. John, of Bletso, whose son sold it in 1595 to Sir Thomas Myddleton, in whose family it still remains," and is now owned by his descendant, Robert Myddleton Biddulph, Esq., Lord Lieutenant of Denbighshire, and formerly in Parliament. This castle is fortified by large round towers at the angles, and a still larger one in front, which had formerly a heavy portcullis. It was besieged by that iron man, Cromwell,

* Another account assigns it a later origin.

and three of its sides were battered down; but it was not taken, being stoutly defended by Sir Thomas Myddleton, that brave old knight, whose portrait we saw in the castle, with pointed beard and antique costume. The hill on which Cromwell planted his artillery is in view from the walls. The position was very favorable for cannon, as it commanded the castle. In the kitchen we saw many articles of ancient armor, with others that were modern. In the lower hall is a large room, used by the present possessor as an office. Some of the apartments of the castle are very splendid. The grand staircase is in one of the round towers, and is adorned with pictures and Gobelin tapestry. There is a magnificent saloon, 60 feet by 30, an elegant drawing-room, 30 feet square, and a long gallery for pictures. The ceilings of the saloon and the drawing-room are adorned by rich gilded and colored compartments. Among the portraits, there are many which are beautiful works of art, and memorable also for those whom they represent. There are the monarchs Charles I. and Charles II., father and son, and an exquisite portrait, by Lely, of Nell Gwynne. The Myddletons were loyal, and their devotion was felt by these monarchs, who acknowledged it by rich presents. Charles I. presented a chest, or secretary, splendidly inlaid with pearl, and a cabinet, covered profusely with massive silver. In a distribution of the Myddleton estate, this cabinet was valued at ten thousand pounds, and, with this castle, was allotted to one of the daughters, while a castle was bestowed also upon each of the other daughters. The very bed in which Charles I. slept, is still preserved in a room adjoining the gallery.

While the other parts of the castle, those especially that are inhabited by the family, have been more or less decorated by modern ornaments, the southwest wing remains in all the stern rudeness and strength of former ages; ages warlike and lawless, when security was the chief object, as rapine and violence were every where abroad.

There are narrow winding stairs of stone in every tower.

O, how tiresome it is to wind and wind your weary way up and down, and still you see it recorded in the very stones on which you are treading, that innumerable feet of those who walk no more on earth, have worn those deep bowl-like hollows as they have manned and watched the lonely towers, and relieved guard, while the tardy hours went round.

The rooms, especially in the towers, are small, and the window recesses terminate in a slit, or loop-hole, for the discharge of arrows, while the opening inward is broad. The doors moved on ponderous hinges, and were furnished with massive bolts. There were also deep and spacious vaults, used as prisons. The principal prison was 50 or 60 feet deep below the surface; it was frightful even to look into this dark, damp, deep, and dismal dungeon. We saw also the iron anklets which had evidently been used on many and many a prisoner, the leather with which (as if to afford some show of humanity) they were lined, was polished smooth by friction. How many sighs and groans were breathed, and how many tears were shed while this slow process of polishing went on!

The interior court of the castle is 165 feet by 100, and is completely inclosed on all sides. There is an arched gateway through which carriages are driven in.

From the summit of the castle seventeen counties may be seen. The walls are ten feet thick.

At the time of our visit, there were numerous attendants around the premises, and the territory gave proof of careful cultivation.

We saw some fine animals, and we were attracted to the stables to see the prince of donkeys; so very large, round, and clean, and having a strong aspect of animal happiness; the only beautiful and happy-looking donkey I remember ever to have seen.

The castle was courteously shown to us by the housekeeper, who, as we entered, requested us to use the rug and to walk on

the druggets. Clumsy felt slippers are furnished in many places, especially on the continent, to protect the polished floors.

Many historical events of interest have occurred in this neighborhood. There are remains of ancient British fortifications, particularly of Offa's dike, which was thrown up as a boundary between the Saxons and Britons. We drove from the castle through a second grand avenue of ancient beech-trees, and soon our road passed through a cut in Offa's dike, a high mound being on each side, overgrown by trees.

In the year 1164 a very sanguinary battle was fought near this castle between the English and the Welsh. On that occasion, many of the English were slain, and were buried in Offa's dike, for which reason the place is still called Adwyr Beddau: that is, the place of graves.

CHIRK CHURCH AND ITS MONUMENTS.—We were now at the end of our posting, and dismissed our carriages. We finished our review of things connected with the Chirk Castle by visiting the church of the village, a neat Gothic building of the olden time.

Its walls are almost covered with the monuments of the Myddleton family. There are groups of statuary, of the size of life, representing family scenes of deep interest, and the figures are wrought with great skill. A mother nursing her infant presents a beautiful and touching scene; as the fond infant clings to her embrace, the marble bosom seems as soft and impressible as in life. Mr. Robert Myddleton Biddulph has a large family pew here, and is himself a regular attendant. It was covered, but the veil was lifted for our inspection; the pew was lined with cloth.

PASSING INTO ENGLAND.—Having finished our rapid inspection of that portion of Wales which we had time to see, and which, as we presumed, might stand as an example of the country at large, we were now prepared to pass into England. Before leaving Wales, I will, however, remark that the com-

mon people still retain their mother tongue. A company of boys, who ran along by our carriages when we were going to Llanberis, shouted to us in Welsh, and no doubt were soliciting money, but we understood not one word of their appeal, nor did they probably comprehend one word of our reply.

The better educated people of course speak English. We could imagine that in the aboriginal Welsh people, of this their native land, we saw the features, physical form, and mental manifestations of the ancient Britons, their ancestors.

Chirk to Birmingham.

A hasty repast prepared us for a rapid ride on the railroad, which we had now reached, and at the station-house at Chirk, we took our tickets for Birmingham. Our course was through Shrewsbury and Wolverhampton.

We had no time to take note of the large town of Shrewsbury, nor even to inquire for the place where the fat old knight fought Hal two hours by Shrewsbury clock, and still less had we opportunity to ascertain the object of numerous manufactories, whose tall and smoking chimneys were frequently in view all along through a populous region. We arrived at Birmingham after the gas was lighted in the grand station-house.

In the English trains the conductors do not, as with us, go through the cars while they are in motion, and take the tickets from the passengers: the train is stopped on its arrival, and before any of the passengers get out, the tickets are all taken and reported at the proper office. At the stations there are many porters and carriages in waiting, but the people are not boisterous and intrusive as with us; they rather wait for your application, or for that of the conductor in your behalf. The baggage is marked, but not checked, according to our system, which, in this respect, is decidedly preferable to theirs.

Birmingham.

March 24 and 25, 1852.

We were very soon established in the Stork Hotel, recommended to us by Mr. Thomas, of the Stork Hotel at Liverpool. At the door we were welcomed by Mr. G., a very agreeable fellow-passenger in the Baltic, and by his friend, Mr. W., both of New-York. It is not difficult for an American to feel at home in England, especially when he meets those whom he has known in his own country. We were soon arranged in our comfortable parlor, and a good dinner, well served, refreshed us for our evening occupation; with our travelling books, our letters, and journals, and the unity of a family circle, whose views and purposes are in harmony, we enjoy an agreeable winding up of the work of our days, which is rarely finished until the midnight hour.

March 25.—Having, when in England in 1805, made a rapid transit through Birmingham, it was with very great reluctance that I was compelled to leave it again without taking time to look into its manufactories, which, as all the world knows, are of high importance, especially in the metals.

Our plan of visiting Italy required the utmost economy of time, and, therefore, we were constrained to take an early departure, after enjoying an extensive drive in open carriages, on a fine morning, through the most interesting part of this great city—a great city indeed—and what a contrast! In May, 1805, when I was here for a few hours, Birmingham contained 78,000 people, now 300,000! We can hardly tell of greater increase in our towns in the United States; and every where, as far as we have hitherto gone, all things tell of progress, of advancement in arts, wealth, population, and general prosperity—a degree of prosperity, however, which does not prevent extreme poverty among the masses—but this does not, to the

general traveller, appear on the surface of things, except in particular cases, as already observed at Liverpool.

Even to our rapid and superficial observation, in the few hours remaining at our disposal, it was obvious that Birmingham is not, as many suppose, merely a dusky smoky town of workshops and manufactories. These do indeed abound, but we drove through numerous fine streets, wide, clean and quiet, adorned with stately private dwellings, and public edifices of magnitude and importance. Birmingham is situated in the heart of the kingdom, in the midst of a splendid country, and its manufactures are transmitted to all the regions of the earth.

Birmingham to Oxford, by Gloucester.

March 25.

In order to reach the great Western Railway, which would convey us near to Oxford, it was necessary to pass to Gloucester on the Severn, and to proceed even to the vicinity of Bristol and Bath. At Gloucester we had merely time to visit the great Gothic Cathedral. It is 440 feet long, and its other dimensions being in proportion, it is therefore of vast size, and is truly venerable and magnificent.

It is full of the tombs and monuments of the religious orders of former days; of Knights, and warriors,* and of the beautiful and lovely, and the venerable of former centuries, as well as of those who have left behind them no memorial but a name.

This church was founded in the time of the Saxons, and the immense arches which we saw in the crypt beneath, are attributed to that people. This establishment was, in gone by ages, an asylum for numerous monks and nuns, whose cloisters

* King Edward II. who was murdered in Berkley Castle, is interred here.

still remain; they are very extensive, and we walked rapidly through them.

This cathedral, like most of the ancient English edifices in the middle and south of the kingdom is, externally, much corroded by time, for like them it is constructed of the oolite, which is a very perishable material. This cathedral suffered also very much from the wanton mutilations by Cromwell's soldiers in the civil wars. Sepulchral monuments—statues erected in honor of the dead, as well as delicate architectural ornaments belonging to the building, are in many instances broken.

Gloucester is on the Severn about 30 miles above its junction with Bristol Channel; it is 105 miles from London, and is a city of moderate size. It is in the midst of a rich and beautiful country, and on the entire ride from Birmingham there was a succession of picturesque rural scenes.

The journey from Gloucester gave us an opportunity to see the great Western Railway. It is indeed a grand road: the track is six feet wide, and the road is constructed of the best materials and in the best manner. It is so firm that the movement upon it is very smooth and agreeable; still, conversation on all the English railroads is difficult to be heard, and this is generally true also of ours in America. The great Western has been enormously expensive, probably beyond any thing of the kind in the world. An English gentleman, with whom we were accidentally associated in the cars upon this road, condemned the expenditure as prodigal and ruinous, and expressed a decided preference for the more economical system of the United States, in whose railroad stocks he was a proprietor.

ARRIVAL AT OXFORD.—The railroad does not enter Oxford, but stops at some distance from it. We arrived before evening, entered the city in an omnibus, when it was raining, and found a parlor and bed-rooms, at the Star Hotel. The house was damp, owing however to the abundance of rain, and to the overflow of the meadows around the city, which we afterwards found to be very extensive.

Our dinners are generally at 6 o'clock in the evening, as this accords best with the convenience of travelling, and with the habits of the country. In this instance, however, we were out of time for the hours of the hotel, and we obtained a sufficient supply of meats only by waiting long, and by renewing our order repeatedly. The attendance also was very deficient. I mention it for no other reason than to add, to the credit of British hotels, that a similar mischance never happened to us any where else.

In the evening I called with my son upon our old friend Dr. Charles Daubeny, Professor of Chemistry and Botany, who in 1837 travelled extensively in the United States, and passed two days in New Haven.

Our reception was very kind, and I shall say more of our intercourse anon.

EXCURSION TO LONDON. *March 26.*—Information had been received by a letter from our friend Dr. Mantell, that there would be a meeting of the Geological Society on the evening of the 26th instant, and that it would be the last of the season.

We therefore determined to attend it, especially as we were desirous to see the eminent men who might be assembled on the occasion, and to hear their discussions. Our friend and fellow-traveller Mr. B., had, at our request, been to London, and obtained our American letters from Dr. Mantell—with good news—and had secured for us lodgings at Morley's Hotel, Trafalgar Square, in the very heart of London.

Arrival in London.

An afternoon ride in the cars through a splendid country, now opening in the luxuriance of Spring—placed us in our beautiful apartments before evening, and I had some leisure to realize the change in this part of London, which I now entered again after an interval of 46 years.

In 1805, there was at the head of Parliament Street, only the junction of the Strand and of Charing Cross. The Strand and Charing Cross are now invaded by the splendid Trafalgar Square, which then had no existence; and indeed the victory by Nelson, in honor of which the square was created and named, occurred only in October of that year, and I saw the general illumination in London, to celebrate the victory, and witnessed the mourning too for Nelson's death.

Trafalgar Square is at the head of Parliament Street, and still retains the equestrian bronze statue of Charles I., which was there in my early time. The colossal statue of Nelson, of the height of 18 feet, stands on a Corinthian column of granite, of 176 feet in its entire height. The square pedestal on which the column reposes is 36 feet in height, and the sides are occupied by bronze bas-reliefs of Nelson's four great battles of Aboukir, St. Vincent, Copenhagen, and Trafalgar; the figure of Nelson even in these tablets is larger than life.

I saw the living man in August, 1805, walking in the Strand, with a great crowd at his heels; he was sun-burnt from exposure on the ocean, in pursuit of the then celebrated Rocheforte Squadron, to the West Indies and back. I was near him when he stepped into a shop, apparently to elude the populace, and saw his features distinctly. In the following September I was at Portsmouth, and from a bastion in the fortification, saw him not far off, step into his barge:—it was the last time that his foot pressed English ground—for he then went on board of the *Victory*, which lay at anchor off Spithead, and on October the 21st lost his life in the battle of Trafalgar.

DR. MANTELL.—This distinguished friend of twenty years—connected with us by an active correspondence, and the interchange of many deeds of kindness and usefulness, received us with the greatest cordiality at his house, in Chester Square, and we were truly glad to know, personally, one who, for so long a period, had commanded our respect and admiration.

Geological Society, Somerset House.

Dr. Mantell went with us to the meeting which was already opened for the evening, Professor Hopkins of Cambridge, President, being in the chair, and we were conducted to a seat, to which we were both entitled by courtesy on the introduction of a member, and myself, by honorary membership. We found ourselves next to a gentleman, whom we had known familiarly in America, and at our own homes; it is hardly necessary to add, that we were received by Sir Charles Lyell, with kindness. Dr. Bigsby, formerly intimate at my house, soon found us out, and gave us a welcome. A long paper was being read by a member, upon glaciers—grooves and scratches in rocks, and upon bowlders or erratics. It was half past 10 o'clock before the paper was finished, and the time for discussion was therefore the more limited: but limited as it was, it drew forth some of the most able men, and we had the pleasure of listening to remarks of much interest, from Sir Roderick Impey Murchison; Sir Henry de la Beche; Sir Charles Lyell; Prof. E. Forbes; Mr. Sharp and others. Sir Charles Lyell announced us by remarking, that "the meeting might hope for some additional illustrations on this subject, from Professor Silliman and his son, who do us the honor to attend on this occasion." Dr. Mantell had privately intimated our presence to President Hopkins, and, in due time, he invited me by name (in a manner equally dignified and courteous), to enter into the discussion. Ignorant as I had been, before we entered the room, as to what subject would be discussed that evening, still, I could not refuse; there was of course no time for reflection, and I was constrained to rise and speak impromptu, substantially as follows:

Mr. President:—I thank you, sir, for affording me the oppor-

tunity to manifest the high gratification which we feel, on being favored with an opportunity to attend a meeting of the Geological Society of London. I trust, sir, that I may be pardoned for a slight deviation from the course of remark which is appropriate to the subject under discussion on this occasion, when I avail myself of it to say, that we are very happy to see the eminent men whose writings we have so long perused with instruction and pleasure, and to listen to their living voices.

In this ancient palace of kings, but now and for many years containing apartments devoted to science, I formerly was a listener at meetings of the Royal Society, and of the Antiquarian Society—and an observer at the Academy of Painting;—but then there was no Geological Society, and during the year that I passed in Great Britain in my youth, the most instructive year of my life,—I was obliged to resort for Geological information, to the ancient and deep mines of Derbyshire and Cornwall; for London then contained no considerable geological collection. In returning to England after so long an absence, I experience peculiar pleasure, not only in seeing the Geological Society still in vigorous action, although no longer in its youth, but also in observing the great progress made in this noble country, in all the great interests of human society. If I may be allowed to judge, sir, from a rapid transit, during a few days, through Wales, and the west and middle of England, I should say, that in all the most important particulars, the country is wonderfully improved, and that its agriculture especially has made great advances. I have witnessed these things with the more pleasure, as I participate in a feeling quite common in my country, of great reverence for, and good will towards the father land, from which we derived our language, our laws, and institutions, our moral and religious principles and habits, our social organization, and to a great extent, our literature and our arts; as we are one people in our origin, I trust that we shall ever remain united in friendly relations, and that the collisions which

have existed, have passed away for ever! In relation to the subject under discussion this evening, I know not, sir, that it is in my power to add any thing important to the very instructive and interesting communications to which we have listened; especially as Sir Charles Lyell has already given to the world, the results of his very extensive observations in North America, observations, not only on the geology of those wide regions over which he travelled, but on our institutions, state of society, manners and government, which he has described with manly integrity and candor.

I beg leave to add, sir, upon the topics of discussion now before the society, that they appear to me to be still embarrassed with difficulties. The theory of glaciers is beautiful, and I am ready to embrace it wherever it is applicable. I have not yet seen the Alps, but I hope to see them soon. I am not aware that we can admit the existence of glaciers in the old United States proper, if we are to judge from the height of the mountains, as they now are, as none of them are sufficiently elevated to produce and sustain these perennial accumulations of ice and snow. The White Mountains of New Hampshire, whose height does not exceed one mile and a quarter above the sea, give up their snowy robe in July and August, and except it may be in some secluded glen away from solar and atmospheric influence, winter there resigns his dominion during a few weeks in the hottest part of summer. Unless these mountains had, formerly, been much higher than now, or the climate much colder, they could not have nourished glaciers, and of course the Allegany or Appalachian chain, none of which are a mile in height, could never have been covered through the year with ice and snow.

I will not here repeat the ingenious speculations of Sir Charles Lyell, regarding the effect of a change in the relative proportions of land and water in the northern hemisphere, in accounting for the greater spread of Ice over this part of the earth at a former period.

The Rocky Mountains, especially the more northern portions, and the mountains on the northwest coast towards Cook's Inlet, may, indeed, produce and sustain glaciers; for they rise to the necessary elevation: many of their peaks and ridges are far above the snow line, and are capped with frozen masses that are never entirely melted.* It appears to me, sir, that the phenomena now under consideration cannot in North America be accounted for, without the admission of floating icebergs, containing rocks and stones frozen into them, which would enable them to score, and scratch, and variously mark the rocks as they passed over them. This, of course, requires submersion of the land to a great extent; and we must suppose also mountains sufficiently elevated above the sea to produce and sustain icebergs, although in polar regions the required elevation would not be great. There must also be an impulse of winds, waves, and currents to force them along; and the higher they rose above the water, the greater would be the pressure they would exert upon the ocean floor. This would be measured by the weight of the column of water which they were able to displace, as this would depend upon the depth to which they were immersed. This would be indicated by the elevation of the berg above the ocean level, multiplied by 8 or 9, which would give its depth beneath the surface. Thus, with an elevation 150 to 200 feet above the water, an enormous pressure would be produced that might pervade extended surfaces of rock as the berg advanced; and when it was stranded, and rolled by winds and waves, there would be sufficient force to produce any of the deepest grooves which we observe, as they would be hollowed out by the rocks and stones frozen into the bottom of the berg, and acting like plough irons or grooving planes in the hand of the carpenter. All navigators in polar regions, and in

* We are assured recently that glaciers do exist in connection with the highest mountains of the United States—Mount Elias and Mount Edgecombe, 1853, March.

all seas visited by icebergs, attest the abundance of rocks, stones, and gravel which, in a visible form, are thus borne over the waves, and which we must therefore suppose are also concealed in the ice beneath them. We must admit also the subsequent elevation of the land above the waves to bring the bowlders and erratics into view, and thus we have a true cause, and one that is sufficient.

I well recollect that a brief paper which appeared some years ago in the American Journal of Science and Arts, of which I have the honor to be senior editor—a paper by a practical manufacturer in America, but a native of Scotland, attracted the attention and obtained the approbation of Sir Roderick Impey Murchison, and was introduced by him into his annual address before this society. [Sir Roderick here nodded assent, and pronounced aloud the name of *Peter Dobson*, the person alluded to.] This paper stated very briefly and clearly the theory of aqueo-glacial action; and this cause appears to me essential, to be combined with that of statical glaciers, acting in place, or moved gently downward and forward in summer, and in winter backward. The two causes will, perhaps, account for the phenomena; but, as I have already remarked, the subject is not without its difficulties, and demands, as it is constantly receiving, additional investigation. Allusion was then made to some striking examples in the United States of bowlders, grooves, &c., and to the remarkable fact that, in accordance with the observations of Mr. Darwin, in South America, the bowlders cease at about 38° or 40° of north latitude. Few are found south of the river Ohio, in Virginia and the Southern States, while they abound in the north.

The working American geologists were also mentioned, whose zeal and activity, favorably observed by Sir Charles Lyell, when in America, and commended by other eminent men in this society are, every year, under the authority of our local and general governments, adding to our knowledge on this as well as of other geological subjects.

The discussions of the evening being ended, we were saluted and warmly welcomed by most of the eminent gentlemen present. The same courtesy and affability were shown which I well remember to have seen at the soirée of Sir Joseph Banks, in Soho Square, in 1805. I was then strongly impressed, as I was again on this occasion, by the community of kind feeling produced by the pursuits of liberal knowledge, whether in literature or science. This catholic feeling binds together in a cordial brotherhood men of different countries; it embraces also those who cultivate the fine arts, and the cultivators of the useful arts also, especially when they have an important bearing upon the welfare of mankind, as Franklin with the printing press, Whitney with the cotton gin, Arkwright with the spinning Jenny, Watt with the steam engine, and Fulton with the steamboat. About midnight we finished by tea and coffee, and free conversation in the rooms of refreshment, and the meeting broke up with great good will.

I have been the more induced to state these particulars of the meeting of the Geological Society, because our departure from London for the Continent will prevent our attending other meetings of this or of the other learned bodies in London. The following day we rejoined our party at Oxford Museum.

Excursion to Blenheim.

Oxford, March 26.

The palace of the Duke of Marlborough at Woodstock, presented to him by the nation, in honor of his services, drew us from Oxford for a morning's excursion. We had the pleasure of the company of Professor Gray and his lady, of Harvard University, on this occasion. It was a cold wintry morning, with rain, but we were repaid for a jaunt in uncomfortable weather by a survey of this magnificent palace, which

occupied two hours. We entered by the splendid portal erected to the memory of her husband by the surviving duchess of Marlborough. The palace is situated on a plain in the midst of an extensive domain, eleven miles in circuit, laid out in the finest style of an English park. There are 2500 acres covered with the richest verdure, including a beautiful lake, from which large pike are obtained. The palace is an immense structure, and has been greatly improved by the present duke, who, it is said, has recently expended 80,000 pounds upon the establishment. It is in vain to attempt a detailed description. The north front measures 384 feet from one wing to the other. We were courteously conducted through the palace by a man of good appearance, and of civil but formal manners. He was dressed in black—you would take him for a gentleman, and feel that it would be improper to offer him money, but he took it from our party. Generally, in Europe, it will be safe to presume that it is expected, unless you are with a person whose position in society is known.

We were taken through one splendid room after another, until it would seem as if there would be no end of them. They were generally lofty, apparently 20 to 25 feet high, and ornamented with rich ceilings, gilding, and fresco paintings. The principal apartments are the hall, the bow-window room, the state bedroom, the billiard room, the breakfast room, the grand cabinet, the small drawing-room, the great drawing-room, the dining-room, the saloon, the green drawing-room, the state drawing-room, the crimson drawing-room, the library, the chapel, and the Titian room. This palace had no appearance of being the comfortable home of the family, who, it is said, kept it up out of regard to the glory of their great ancestor; but that they are too poor to live in it in a style of appropriate magnificence.

The gardens or pleasure grounds, and the private grounds, were not visible.

The pictures in this palace are numerous, and many of them are admirable. Vandyke, Sir Godfrey Kneller, Rubens,

Holbein, Paul Veronese, Leonardi da Vinci, Reynolda, Poussin, Carlo Dolci, Corregio, Rembrandt, Teniers, Titian, and other eminent artists, by mental creations, contributed the living glowing images of their own minds, or transferred living features to the canvas. Many very beautiful and lovely women and princely men look down upon the observer from these animated and eloquent walls; for the palace is, in fact, an immense gallery of pictures, divided among many rooms. The victories of the Duke of Marlborough are displayed in Antwerp tapestry upon the walls of several of the apartments. The tapestry pictures are of great size: a single picture covers a side, sometimes two sides of a large room; so that there is space to exhibit also the scenery of the country;—there is room also for portraits of the principal officers as large as life—of the duke himself, and even of the horses; and near or remote, the hostile armies are lingering on the fearful edge of battle, or they are actually engaged in deadly combat. How touching the reflection, how sad the remembrance, that, excepting the present duke and his family, only one individual of all the vast number of human beings represented by these pictures survives. One that appears as a little child in a large family group, is now the aged grandmother of a distinguished peer. All the rest have passed away, and the great Marlborough himself, and his proud, aspiring duchess, lie under the marble pavement of the chapel in the palace, as Louis XIV. le Grand reposes in his own tomb, and Queen Anne in hers; and all the sanguinary conflicts of that eventful period are now to be found in history alone. War, by a spirit of chivalry, was then a kind of duel on a great scale; it is said that military courtesy sometimes offered the first fire to the enemy; and a similar offer being made in return, they thus bandied compliments as if in sport, when they knew that the first fire would lay many a gallant soldier low.

One room is 183 feet in length, and contains the ducal library, consisting of 17,000 volumes. They are protected by a wire netting in front. At the upper end of the library is a fine marble statue of Queen Anne, which cost 5000 guineas.

This palace, like most of the ancient public structures in England constructed of oolite, is externally much corroded by time.

These immense establishments are, of course, very expensive in repairs, in embellishments, in service, and in many other ways; but they bring no income, nor, in general, does the vast domain which surrounds the palace. If kept in high order, as they generally are, they require a great number of laborers, especially in the horticultural department; and for all this there is little or no return, unless it may be something towards household for the supplies of food.

Noblemen are not always to be found in their palaces in London. A distinguished foreign minister occupies the establishment of a nobleman at a rent of two thousand pounds, while the nobleman and his family live in retirement.

There is at Blenheim a column or obelisk to the memory of the Duke of Marlborough, which is 134 feet high, crowned with a statue in Roman dress.

The gallery of Titian is secluded in a separate building, and for reasons obvious to those who have seen it, is exhibited in a more reserved manner to artists and amateurs.

PRESENTATION FOR DEGREES AT OXFORD. *March 26.*—A brief sojourn near a great university cannot afford, to a stranger, any competent knowledge to enable him to judge of its actual condition. A few things that have passed under my notice are all that I shall venture to mention.

We attended a presentation for degrees in one of the old halls. The room was very cold, and there appeared to be no arrangement for warming it. To us, who are accustomed, even in spring, to the cheering effect of diffused warmth, it was very uncomfortable, and we did not regret that an hour ended the ceremonial. We were informed that it is a weekly performance, which may account for the apparent want of interest and solemnity. The University officers were present in their official costume, which is, indeed, graceful and elegant, and they were generally men of genteel appearance. The communications were in Latin, but very brief, and they were disposed of with

such haste, and in so low and indistinct a manner, as to give the occasion the appearance of a mere ceremonial, in which very little interest was felt. Most of the sentences were inaudible; but from the little I did hear, I inferred that the pronunciation was the same as that used in Yale College, with no more difference than might be expected from English intonation.

The Vice-Chancellor, Dr. Plumtree, a tall and elegant gentleman, hardly arrived at middle-life, presided with graceful dignity, and his *admitto vos*, and a few other words in his very brief affirmation of the doings, I could hear with tolerable distinctness. Our ladies attended on the occasion, and one of the gentlemen of the University was very attentive in explaining to us the ceremonial. It is obvious that Oxford has imbibed very little of the spirit of modern improvement. We are assured that physical science is not favored by the great body of the University, and indeed it appears to be decidedly discountenanced. The classics—very valuable, as indeed they are, and always deserving a high place in a course of general education—are here, along with some portion of mathematics, and with the moral and intellectual sciences, especially logic, the great absorbing topics, and there has been little change from the courses of former centuries. Neither Dr. Buckland (now Dean of Westminster), nor Dr. Daubeny, both of them men eminent in their professions, the former in mineralogy and geology, the latter in chemistry and botany, could obtain more than a meagre class, not on an average twenty pupils, in a University which has 6000 members on its books, and 1500 in actual attendance.*

* On the question, who are members of the University, and what are their duties and privileges, in answer to inquiries, I have received, from high authority, the following reply:

"All who have taken a degree, and continue their names on the books of the University (for which they pay a small annual fee), are included in the number of 5900—(last year, 6080.)

"If Masters of Arts, they have the privilege of votes at Univer-

A Parliamentary inquiry into the condition of the universities has elicited, among other documents, a report by a distinguished professor of Oxford, of which I have a copy. It presents a table of the attendance for a series of years, on the lectures of the different professors of science, and one is astonished to find that it is rare that any professor has more than ten or twelve, some only five or six, pupils, and some of the chairs are even at zero. Some of my American friends who have visited Oxford with an introduction from myself to Dr. Buckland, and have been by him invited to his lectures, have been astonished to find perhaps only a dozen pupils.

No wonder that the spirit of Dr. Buckland, a noble man, of high talents and attainments, seconded by great zeal and industry, and eloquence, should have been discouraged by classes which would be meagre indeed even in any of our infant colleges in the youngest States of the Union. He is said to have ended his last course in Oxford, with only three pupils! Dr. Buckland's lecture-room could hardly have accommodated with seats more than twenty or twenty-five persons.

Dr. Daubeny's lecture-room is new, and was well fitted up with all necessary conveniences and appendages, but it was small; perhaps the seats would receive thirty or forty. The

sity elections, including those for the members of Parliament, who represent the corporate body.

"The members actually studying, are, of course, much smaller; I should conceive that 1500 would include all the students, though probably not the resident Trustees and Fellows.

"The number of matriculations in 1851, was 359, which, multiplied by four, would give 1436 as the number of undergraduates. The members of convocation (viz., M. A., and in higher Degrees,) was, in 1851, 3352; leaving for B. A. 1292, so that the total number would be 6080. No residence is required of M. A., and only three weeks of B. A. Undergraduates also are allowed three terms of absence during the four years before taking their degree of B. A. The terms of attendance at the University are but twenty-six* weeks.—*Extract of a letter from the University of Oxford, May 19, 1852.*

* In Yale College the terms are forty weeks.

impressions of a transient stranger may be erroneous; but I will quote the remarks of an Oxonian, one of the sons of the University, a man of science, a scholar, and a man of world-wide fame. It was in London; he remarked to this effect: that so strong is the University in wealth and patronage, that they are able to go on in their own way, despite of the influence of the age, and of public opinion. The great object, he remarked, among the fellows, was to obtain livings in the church, and to this end their studies were mainly directed. He did not doubt that should some college decide that they would study Chinese alone, they would be able to carry it out.

In consequence of the movement now making by government, it is expected that more attention will be paid to science; that the attendance will, hereafter, be rendered obligatory, and that, therefore, larger classes may be expected. Even the eminent gentleman, himself a distinguished professor, who expressed this hope and expectation, did not venture to propose, in the pamphlet alluded to, more than partial courses of science, containing great leading principles, and selections of facts, without going fully into any of the sciences.*

Many years ago (November 1805), being a guest at the house of the late Henry Thornton, Esq., M. P., at Clapham, near London, I met there his friend and neighbor Mr. Wilberforce, and I will now quote from my early travels a part of the

* Respecting the report alluded to above, it is remarked, in the letter already quoted:

"It contains a large and valuable body of evidence, but it is not certain that any substantial measure will be founded upon it."

In the mean time, some progress is making here in the promotion of scientific studies. "It is hoped that a considerable sum of money will be voted for the reception and maintenance of the Fielding Herbarium, one of the finest in Great Britain, once offered to the Botanic Garden." "If so, foreign botanists may find at Oxford greater facilities even than at the metropolis, for the study of plants, considering the easy access to our collection." "We hope also to have a museum erected, more worthy of the University, than the one you saw."

account of that interview. "They requested me to give them a minute account of the state of our schools and colleges, and especially of the course of studies pursued, the discipline, the religious instruction, the preparatory steps, and the ultimate honors and distinctions. They were not satisfied with a merely general statement. They commenced with the elementary school, and wished a very minute and detailed account of our means of instruction from the humble beginning up to the honors of the university. I complied with their wishes, and of course explained to them more particularly the situation and literary means of my own State and college, because with them I was best acquainted. I did not, however, omit those of the other States, and endeavored to blend generals and particulars in the best manner I could. They requested a particular account of all the studies pursued in Yale College—of the authors read—the manner of reciting, the responsibility both of instructor and student, the examinations, and in short, the whole machinery of the institution. I then explained to them the nature and extent of the school fund of Connecticut, and the manner in which it was applied."

They expressed in strong terms, great satisfaction, and a very favorable opinion, of the comparative advantages of the American and English system of instruction. No doubt, very high attainments in scholarship are made at the English universities—and a system adapted to a country having monarchical, aristocratical, and hierarchical institutions, can hardly be compared fairly with one adapted to our simple state of society and institutions, founded on a universal democracy. Since the period of the conversation quoted above, very material improvements in education have been made in the United States, and there is certainly great room for additional advances. But if we do not make as many eminent scholars as are trained in England, we raise up efficient practical men, who can manage successfully the actual business of life, and our system is probably therefore better adapted to our actual condition. Some of the university gentlemen here to whom the outlines of

our system have been explained, during our present visit, have expressed surprise that so much should be done by us, and particularly that examinations should be carried out in so many departments.

I have already mentioned that Dr. Daubeny travelled in the United States in 1837, and printed for private circulation an account of his travels, a very fair and candid book. He was very kind to us in Oxford, and at his house, at dinner, we met a circle of gentlemen, chiefly of the university, and some ladies were with us in the evening. Dr. Daubeny's laboratory and scientific collections are in a wing of his mansion. The conservatories of plants are in the rear, and the botanical garden is immediately adjoining. Every thing in the departments of Dr. Daubeny is in perfect order, and evinces a correct and elegant taste. His house is adorned by pictures and other objects of art, and dignified by an ample scientific library.

It is proverbial that the fellows are wont to be polite and hospitable to ladies visiting the University, as well as to gentlemen. Whatever may be said of ages that are passed away, it would seem that it can be no longer important to perpetuate monastic celibacy as a condition for a fellowship; it appears peculiarly unfortunate to detain men—usually too of a high order of mental power and moral excellence—until the meridian of life is attained or gone by, before they can enter upon those duties and enjoyments which have a peculiar sympathy with early manhood.

I was sorely disappointed of one pleasure, which I had long anticipated, in case I should ever again visit England—I mean an expected personal intercourse with Dr. Buckland, from whom, in correspondence and various communications, I had received much kindness during many years. But an inscrutable Providence has permitted his noble mind suddenly to fail—and we are painfully assured that he is now in a state of hopeless imbecility! It is said that he was overdone with cares and labors, and with incessant mental excitement. As dean of Westminster he has, happily, and will have during life, an ample revenue.

DR. KIDD, ALDRICHIAN PROFESSOR OF CHEMISTRY.—With this amiable and excellent man, I had sustained an early correspondence, and he met me now with the warmth of an old friend. He even remembered me as I was when here before, a fact which I could not have believed, except on his assurance, that all vestiges of the youth were not obliterated from the features of the veteran. Dr. Kidd kindly brought some of his family to see us—attended us in some of the public rooms, and made me welcome in his own house. Dr. Kidd was one of the early lights of the University in physical science.*

CABINETS OF NATURAL HISTORY AND LIBRARIES.—Dr. Buckland's collections in mineralogy and geology, especially the latter, were extensive and various, and exceedingly valuable. The Saurian remains, the cavern bones and the fossil vegetables are particularly fine; but they are crowded together in a manner to prevent their just exhibition. The jaw and teeth, and other bones of the *Megalosaurus*, the great fossil Saurian discovered by Dr. Buckland in the Stonesfield slate are here. The trees of the coal formation are of magnificent size, and they fully prove, along with many other such specimens, in the British and Continental Museums, that in the swamps and vast moist savannahs of the coal era there were grand forest trees, as well as a more humble and more exuberant vegetation. At this period the *coniferæ* first appeared on earth. There is in Dr. Buckland's museum a great exuberance of specimens, but after abstracting superfluities, duplicates and unmeaning things, there is still a vast collection, which in honor to his memory and in justice to science should be displayed, advantageously, in more ample space. Indeed we were assured that it is in contemplation to make a better arrangement. As the collection is now situated, it makes no impression, compared with what it would do, if properly exhibited.

* A light which I much regret to say shines no longer in this world. That estimable man died of a sudden illness in September, 1851, six months after our interview in Oxford.

THE ASHMOLEAN MUSEUM* is in much better condition. It embraces various branches of Natural History, besides many miscellaneous objects of historical and personal interest. Among the latter, are a watch and a glove of Oliver Cromwell—a glove of Mary Queen of Scots—a watch and shoes of Elizabeth of England. There is also an early Latin exercise of hers in the Bodleian Library.

The remains of the hat of Bradshaw, president of the board which condemned Charles I., are also in the Ashmolean. What is however of much more importance, is the head of the Dodo, the extinct bird of the islands of the Indian Ocean. In Dr. Buckland's cabinet are the minute fossil jaws of the opossum of the quarry of Stonesfield slate, near Oxford, a viviparous and air-breathing animal, occurring in the early oolite, and which, being apparently quite out of place, has given great cause of discussion to geologists.

There are many large and valuable libraries in the different colleges of Oxford, which we had not time to visit. We looked into the two great libraries, the BODLEIAN and the RADCLIFFE.

The Bodleian was founded by Sir Thomas Bodley, and was opened to the public in November 1602. It contains more than 400,000 volumes, and an immense collection of manuscripts, ancient and modern. It contains also a great number of pictures, chiefly portraits of distinguished individuals, and among them is that of John Duke of Marlborough and the famous portrait of the Earl of Arundel, painted by Vandyke. There is a superb bronze statue of William Earl of Pembroke, chancellor of the university from 1616 to 1630. But it is in vain to attempt to enumerate the interesting objects contained in this vast collection.

THE RADCLIFFE LIBRARY, named after its founder, Dr. Radcliffe, is about 100 years old. It is in a grand Rotunda, in a building erected on purpose for its accommodation. It contains about 200,000 volumes, chiefly on subjects connected

* Named from Elias Ashmole, who founded it in 1667.

with the natural sciences, embracing also Natural History, Medicine, Voyages and Travels. It is rich in Persian, Arabic, and Sanscrit manuscripts. The library, has a grand dome.

There is an interesting collection of statues, busts, and pictures, and many miscellaneous objects; among them is a large and elegantly mounted collection of polished marbles and other stones, including a great variety; there are 1000 pieces, each about six inches long, three broad, and two thick. We ascended outside to the gallery of the dome, and enjoyed an extensive view of this city of colleges, and of the rich and beautiful country by which it is surrounded, but we saw it extensively deluged owing to the excessive rains. Our progress through the Radcliffe library was facilitated by a person of the most respectable appearance—in the dress of a gentleman, who was so well acquainted with the books and the other articles in the library, and so courteous and intelligent, that I whispered to my companion that it would not answer to offer this man money, and we had parted at the door with simply the usual civilities and our thanks; but it occurred to me that it would be the safer way to offer a gratuity, which was promptly accepted. Thus I found, that in this particular there is no change in English customs since my former visit. A stranger at Oxford finds use for no inconsiderable number of shillings in a morning walk over the public rooms: almost every apartment has its own guide, and each guide expects his gratuity. In justice to England, I add, that we met with only one instance on the Continent where money was refused. It was at Lyons. An ingenious mechanical invention had been exhibited, when money was refused by the person who showed it to us, and evidently with the appearance of disturbed feelings.

General Remarks.—There are in the University nineteen colleges and five halls. The colleges are on foundations of property: the halls are but partially endowed, or not at all. In my former visit, May 1805, I remarked: "Oxford is a place of great grandeur and beauty. The whole town has an univalued air of magnificence and dignity. No place ever impress-

ed me with such feelings of admiration and awe. Instead of the narrow and dirty lanes of trading towns, and the confused noise of commerce, there are spacious and quiet streets, with fine houses of stone, built in very good taste. But what produces the principal effect is the great number of academic buildings, in a style of much grandeur, and rendered venerable by strong marks of antiquity. The effect is very much heightened by the frequent avenues of lofty trees, and by the associations naturally connected with a university which claims Alfred the Great as its founder."

As Oxford then appeared to me, so it appears still; but the impression being no longer novel, was less vivid, and I was now more strongly impressed with the mutilations that time has made upon these venerable structures. Delicate ornaments on the outside of the buildings are much injured, and even faces and heads that were originally mounted upon porticos, gateways, cornices, &c., are so dilapidated that they are no longer ornamental. But these external injuries seemed to set off, by contrast, the freshness and perfection which we still find in the interior of these time-honored buildings. Their chapels and halls, often splendid with Gothic arches and elaborate carving and modelling, and rich with stained glass, remain as proud monuments of the skill of past centuries, and of the liberal devotion of wealth to religion and learning. The tender oolite is the material which has suffered so much from time. Its great abundance in England, and the ease with which it is obtained and wrought, have caused it to be generally used in architecture, instead of those more permanent materials that are rare in England, although abundant in America.

MONUMENT TO RIDLEY, LATIMER, AND CRANMER.—The grand monument erected in 1841, called the Martyrs' Memorial, to the memory of Ridley, Latimer, and Cranmer, is one of the most interesting objects in Oxford. It is 73 feet high, and stands in St. Giles'-street, near the place where these venerable witnesses to the truth were burned for the crime of heresy. The inscription is: "To the glory of God, and in grateful com-

memoration of his servants—Thomas Cranmer, Nicholas Ridley, Hugh Latimer, Prelates of the Church of England, who, near this spot, yielded their bodies to be burned, bearing witness to the sacred truths which they had affirmed and maintained against the errors of the Church of Rome; and rejoicing that to them was given, not only to believe in Christ, but also to suffer for his sake, this monument was erected by public subscription in the year of our Lord MDCCLII." They were burned in 1555. The Oxford dereliction of the principles of the Reformation, in little accordance with this monument, is still going on; and Dr. Pusey is himself, as I was credibly informed, engaged in hearing confessions, and is even more zealous than ever in propagating his own peculiar views.

Oxford, as is well known, adhered strenuously to the Royal cause during the controversy between the king and the parliament and Cromwell. This city in the progress of the civil war became the head-quarters of Charles and the cavaliers; from its walls they issued to battle, and generally to sustain disaster and defeat from Cromwell and his indomitable bands of hardy yeomen, trained under the rigorous discipline of their lion-hearted leader. Some portions of the towers and walls of Oxford of that day remain as memorials of the past.

The city of Oxford has more than doubled its numbers since 1805. Then they were 12,000; now, including all its institutions, there are 27,000; thus it has partaken of the general thrift of the kingdom.

The distance from London is 54 to 58 miles, according as the measurement is made on one road or another.

Return to London.

March 28, 1851.

Our party went to-day to London, passing through one of the most beautiful countries in the world. Even at this early season it is rich in verdure, and the fields are every where in high cultivation. The system of irrigation appears to be extensively practised, the water, where the situation admits of it, being led over the ground in slender rills. The beauty of the fields was so intense, and for long distances, quite to the limit of distinct vision, that we were often held in admiration. Beautiful as England appeared to me when all was new to my eyes, it appeared even still more lovely now. In the rapid flight of the cars, it was impossible to retain the names of towns and villages; but one magnificent object loomed upon our right, at the distance of a few miles—Windsor Castle, with its princely towers. The associations with Windsor Castle are of the most interesting kind; and nothing can surpass the richness of the prospect. The venerable Eaton Hall is also at the foot of the hill, and with the adjoining plain, on which his house stood, the memory of the elder Herschell is indissolubly associated.

ENTRANCE TO LONDON FROM THE WEST.—The extensive station-house at the terminus, on the West of London, is in a region which was quite in the country in my early time here; and we drove from it through streets that are principally new since that period. Then the Edgeware road was the extreme limit of London, at the end of Oxford-street, and beyond Hyde Park. Now the Edgeware road is far within the city; and as we approached the region with which I had been best acquainted, we passed through Regent-street and the Crescent, which are entirely new. I have already remarked, that in place of the intersection of Parliament or Whitehall-street with the Strand, we now find a splendid open area called TRAFAL

GAR SQUARE. This square is not in verdure like most of the squares of London, but is entirely paved with flat hammered stone-work, in which spouting fountains play into stone basins. In the centre of the front of the square is the lofty column already named, crowned with the colossal statue of Nelson in full naval uniform, and wearing a three-cornered cocked hat. Almost at his feet is the old, and comparatively diminutive, equestrian statue of Charles I. In the rear is a colossal equestrian statue of George IV., and at some distance south and west one of George III. All these equestrian statues are of Bronze. There is also a statue of the late Duke of York, on a marble pillar, similar both in the material and in the effect to that of Nelson.

That a splendid naval commander, who had been successful in so many terrible and sanguinary battles, in crises deemed by his countrymen to be those of extreme peril to the national safety, should receive the honor of a colossal statue, mounted on a column proudly eminent above every other statue of the metropolis, is not extraordinary. It is, however, always to be regretted when a blaze of public fame becomes a cover for serious personal immorality, as in another example.

Perhaps it is not extraordinary, that in a country with monarchical and aristocratical institutions, honor should be rendered to departed kings and princes; but it is unfortunate when it is thus rendered to those who have little or no claim beside. George III., by his obstinacy, lost the American colonies; for it is now notorious that the atrocious slaughter of his American subjects during eight years, and of his own troops, in perpetrating those domestic massacres, was persevered in by the inflexible will of George III., and was not chargeable to his ministers alone. Whence, then, his claims to a statue? Every difficulty with the colonies might have been amicably settled, and with mutual advantage, had there been wisdom and moderation in the king and parliament. George IV. was through his whole life a profligate, and performed no public service for his country, or for mankind, while his private example was noxious;

and if his persecuted queen deserved a public trial, he deserved it much more. The Duke of York had the same moral taint ; and he lost the greater part of a fine British army in the disastrous expedition to Walcheren, being compelled to retreat before disease and the French legions. Statues should be reserved for persons of distinguished merit, or who have rendered important services to their country or to mankind. Westminster Abbey and St. Paul's Cathedral respond to this sentiment.

While our party made their home at Morley's, in Trafalgar Square, I accepted the proffered hospitality of my friend, Dr. Mantell, at his house in Chester Square ; his interesting conversation and kindly manner, with the rich collection of objects of nature and art in his mansion, made it a very delightful abode, and I shall say more of it hereafter.

ARRANGEMENTS—IMPRESSIONS OF OLD SCENES.—With our noble-hearted minister, Mr. Lawrence, who greeted us as friends, we made all necessary arrangements for Paris. He is prompt to aid his countrymen, whether known to him before, or not, and his official services are rendered with hearty good will.

With the Barings, also, whose fame and credit are coextensive with the civilized world, we arranged all pecuniary concerns, by establishing connections with bankers in all countries and cities to which we expected to travel.

In passing to the Barings, in Bishopgate-street, we traversed the Strand, Fleet-street, Ludgate Hill, Cheapside, and Cornhill, a part of London with which I was formerly very familiar. There I found myself very much at home, as there was comparatively little change.

Two churches, as formerly, stand in the Strand, but the famous old St. Dunstan's is taken down and rebuilt ; the bronze giants that formerly looked down upon the passers-by, and with their ponderous clubs struck the hour upon the bell, are gone, having been purchased by a nobleman, and removed to one of the parks.

St. Paul's Cathedral rises as magnificent as formerly, but it

seems more dingy with smoke than ever. Bow Church remains, and the sound of its bells still designates, as I suppose, the limits of the cockney range. The Bank of England is where I left it, and so is the Lord Mayor's palace, but the Exchange is new, that of Elizabeth's time having been destroyed by fire, with all its solemn array of the statues of kings and queens, which, from the niches in the walls, seemed intent on watching the movements of the merchants on 'Change.

A new Exchange, in the Grecian style, on a much grander scale, now replaces the old one.

THE CRYSTAL PALACE. *March 29.*—Into this wonderful and imposing structure we have to-day merely made our entrance. As we drove along the eastern side of Hyde Park, on a bright and beautiful morning, the splendid vision caught our eyes, as the sunlight was thrown wide around by this immense mirror. It was merely a glance that we took on this occasion, reserving more deliberate observation for future opportunities.

It was not accessible, as yet, to visitors, but by particular favor, through an introduction to one of the managers, we were admitted into the interior. It has become so familiar, in all its aspects, to the whole world, that at this date, after its complete development, any detailed description would be out of place.

The general impression made upon us, by our walks through this stupendous conservatory of the arts, was that of great splendor and magnificence. It appeared a fairy palace, like the creations of fable; a building equally unique and original in its structure; original, also, in its bearing upon the concord and amicable rivalry of nations; in this respect, of most auspicious tendency, and, therefore, highly honorable to the amiable and benevolent character of the Prince, under whose auspices it has arisen. Already the consignments of the world are coming in, and to a great extent have actually arrived. African Tunis sends its contributions, and even more remote countries are beginning to occupy the large space allotted to them. The palace is so high as to cover several of the large

trees of Hyde Park, where it is erected; and we saw, not without a shudder, a man dangling in the air at the end of a rope near the roof, at the height of eighty feet. He had been drawn up simply by holding on the end of the rope by his hands, and was whirled around and around, until he reached a plank almost in the angle of the roof, where at last he was safely landed.

Thus we leave, for the present, this wonder of wonders, hoping to find it, on our return, filled with the productions of the world. All arrangements are so far advanced that it will doubtless be ready to open at the appointed day.

SOIRÉE AT DR. MANTELL'S.—The evening was rendered very instructive and agreeable, by Dr. Mantell's kindness. Aided by his nephew, Mr. Woodhouse, he exhibited the powers of his large Ross microscope in revealing the structure of minute organisms. We examined, especially, the minute shells in chalk (called *polythalamia*). By the aid of acids in removing the lime, the peculiar structure of these curious organisms is perfectly developed. Infinitesimal beings were enveloped for ages in a deposit, which, at the time they were living, was beneath the sea, although during other ages, following on in the long roll of time, it has been dry land. In the entertainment of the evening we were aided by a very intelligent lady and her daughter from Clapham, Dr. Mantell's former residence.

His principal microscope was presented to him by his Clapham friends, at an expense of 100 guineas, as an acknowledgment of his disinterested efforts to spread a taste for scientific pursuits among the inhabitants of that village.

TEMPLE BAR.—Temple Bar, in the Strand, is the only one of the ancient gates of London that is maintained, and it is to be hoped that it will not be removed. It was once a part of the line of defence, when London was surrounded by a wall, but is maintained chiefly in relation to the admission of the monarchs into the city, after their coronation. A splendid pageant, preceded by the proper officers, in ancient costume, appears at the gate, and with great form demands admission

for his or her majesty to the good city of London. Admission is granted with equal formality, and the Royal cortège passes from Westminster into London.*

CHURCH OF THE CRUSADERS. *March 30.*—The Knights Templars had an establishment in London as early as the reign of Stephen, and it was removed to its present location in the reign of Henry II. Just within Temple Bar, down a narrow alley, is the now revived and beautiful church of the Knights Templars of Jerusalem. The building is about 600 years old. The once splendid dome and walls had been, age after age, whitewashed† until its elegant colored frescoes had all been covered. But it has been restored, at an enormous expense (£80,000 it is said), and its superb Mediæval decorations have been again brought to light.

We attended worship here to-day, it being Sunday. The service was very long; the prayers, with the responses, occupied one hour and a half, and then followed the sermon, which, on account of the reverberation from the arches, was hardly audible. In the responses, young boys united their clear and soft voices with those of the people, and were heard above the rest. After service was over, we saw, with no small emotion, the figures of the knights in bronze, laid upon their marble tombs, even with the floor, and surrounded by an iron railing. As objects of art, they are very beautiful. They are in complete armor, helmets, shields, swords, gloves, and spears, all in

* "On such an occasion, the gates are shut to, and the authorities drawn up within, on the city side. A herald, or other officer of the king, knocks at the gate and informs the marshal that the king asks admission. The marshal reports this to the Lord Mayor, who gives orders that the gate shall be thrown open, and proceeds to offer the king the city sword. The gate is sometimes strictly kept, for the Lord Mayor being, within his bounds, second to the king alone, he is jealous that his precedence of other great personages is preserved." —*London Exhibited*, 1851.

† The accidental flaking off of the whitewash first brought to light again the beautiful ceiling that had been covered by this rude coating.

proper position; the hand grasping the sword, or placed in such a posture that the sword could be immediately seized.

They are lying in the warrior's calm and sweet repose. Their features are perfectly natural, and there seems to be almost an incipient movement, as if they were about to spring upon their feet, or prepared to do it at any moment. A few of these crusaders were veterans, hardy warriors, who had often looked death in the face; but the greater number were young and handsome men, and no doubt many such perished in conflict, or sank beneath the pressure of fatigue, or gave up their lives ingloriously to diseases of the camp.

Of this group of recumbent statues, those of the originals, who had reached Jerusalem, had their legs crossed. The effect on the beholder is pleasing, but it is solemn and touching. I have never seen any effigies of warriors, sleeping in death, that were so interesting, for it was just a scene of warriors armed, cap-a-pie, and taking their repose. This church is regarded as a masterpiece of architecture, for the age to which it belongs.

It is not of large dimensions. The rotunda is 58 feet in the interior diameter, and the choir 58 feet by 82. The height of the lantern is 60 feet.

Our party were not a little annoyed, both here and elsewhere in England, by the venality of the church vergers, whose rudeness to strangers can be appeased only by the shilling, so potent a charm to all classes of menials in England. However proper such demands may be on ordinary occasions, they should, for the national honor, be banished from the house of God, and from the sacred hours of the Christian Sabbath. It is unworthy of the glory of England, that her great national churches should be shown for a sixpence.

SERVICE IN WESTMINSTER ABBEY. *March 30.*—In the afternoon we attended Westminster Abbey, where the service was chanted, as in the morning at the Knights' Templars. This immense temple was very cold and cheerless;—no annoyance indeed, to the dead who slumber there, but comfortless, and even dangerous, to the living. There was a promiscuous group

gathered in the centre, of people apparently of the middle class of society; neither the features nor the dress of the audience indicated any thing more; but they were decorous and attentive to a very good sermon on the regulation of the passions, pronounced by an aged and venerable man; but being still vigorous, and having a powerful and well modulated voice, he was distinctly heard amidst the reverberations of these lofty arches. The columns resembled vast stalactites, adorned by fretted work in the roof; and it required but a small effort of the imagination to transport the observer to the immense natural temple—the mammoth cave of Kentucky, where, in September, 1850, service was actually performed, and hymns were sung in a temple not made with hands. The service was conducted regularly by a clergyman of the Episcopal church, and a part of the friends now with me were then present.

In Westminster Abbey, the circumstances of the occasion did not now permit me to pay much attention to the monuments, some of which, however, I recognized as having been here at the time of my former residence in London.

BRITISH MUSEUM. *March 31.*—We passed several hours this morning in this now magnificent national establishment. It is still in, or rather contiguous to, and covering much of, Russell Square, as in 1805, but it is entirely renovated. My son had been there on Saturday, and had an interview with Mr. Watts, one of the librarians, who is himself a living Polyglot, as he speaks 27 languages. I will not in this connection withhold a personal circumstance of some interest to myself, relating to my former travels in England. Mr. Watts stepped up a ladder to a high shelf, and brought down a work in three volumes, which, he said, they had only recently obtained. In it, he remarked, is contained the best account of the British Museum, as it was at the time when the book was written (1805–6); and, he added, that only two accounts of the museum had at that time been published by travellers, and this account was one of the two. In reply to his

commendation, I remarked, that the notice was brief; but, he rejoined, that it was exact and comprehensive.

The edifice containing the British Museum, as I saw it in 1805, was of brick; and the area in front was then filled with Egyptian antiques, being spoils gathered by Napoleon, and assembled at Alexandria preparatory to their transportation to France. They were there captured by the British army, under General Abercrombie, and taken to the museum during my former residence in London.

I now found a grand building of stone, forming a vast quadrangle of 2000 feet, or nearly two-fifths of a mile in circuit. It occupies a large part of Great Russell Square, and is even now, in its enlarged form, quite inadequate for the growing demands for space in all departments.

I had only time to pass rapidly through several of its rooms, and cannot undertake to give any complete account of their contents. A few things, however, we did see with great satisfaction, and which I will briefly mention.

Here is a rich collection of Etruscan vases, from the cemeteries of the ancient inhabitants of Italy, who preceded the Roman empire. A part of this collection was deposited by the Prince de Canino, son of Lucien Bonaparte. The Maltese are now the only people who fabricate ware like the ancient Etruscan. Through the kind introduction of our countryman, Mr. Henry Stevens, to Mr. Vaux, a gentleman attached to the museum, we were permitted to see the original *Portland Vase*. It is of moderate dimensions. The material, contrary to my former impression, is glass, and not earthenware. The basis was dark blue, almost black, and in the manner of the modern Bohemian glass, it appears to have been dipped into a semi-transparent white enamel, which gave it an exterior coating of that color. This was then cut away, so as to leave the exquisitely wrought figures of the human form by which it is adorned. It was successfully imitated by the late Mr. Wedgwood, in his peculiar porcelain, but it has never been surpassed in beauty of model, or in the perfection of its decorations. Mr. Wedg-

wood's copies cost 50 pounds each, which, even with a large subscription, did not reimburse him. Mr. Webber, the artist, received 50 pounds for modelling it.* The original was discovered in the tomb of Alexander Severus, who died as early as the year 235, and the Duchess of Portland paid 1000 guineas for it; hence it was called the Portland Vase. It will appear incredible that any one should be willing to destroy such a gem of art; still, a few years ago, a man who was believed to be either drunk or insane (very probably both) hurled a stone at it, and shivered the beautiful antique into fragments. A fac-simile of the vase, as it lay in ruins, is preserved in a glazed frame in the room. But by great care and skill, the fragments have been reunited, and cemented together, so that the joinings can be perceived only by a near approach.† The culprit was imprisoned for two years; and a law being afterwards made to fit such cases (*ex post facto*, perhaps), he is, I believe, not yet liberated, and, certainly, ought not to be without satisfactory evidence of a sounder state of mind.

ORNAMENTS OF GOLD.—In the same room with the Portland Vase is a rich collection of antique ornaments in gold. They are personal ornaments—Etruscan, Roman, British, Saxon, Norman, Scotch, and Irish. Among them are elegant forms—rings, bracelets, girdles, tiaras, brooches, &c. They are in appearance as rich and bright as if made yesterday; and evince that in ages long past both the value of gold and the manner of working it were well understood. Some of these things were found in graves, some in morasses, and, probably, some on battle fields.

MONUMENTS OF ANCIENT NINEVEH.—Mr. Vaux also showed us the colossal monuments of stone, disinterred by the labors of Mr. Layard, and brought from ancient Nineveh.

The bull and the lion, each with the wings of an eagle, and the face of a man, symbolical of strength, courage, speed, and

* Park's Chemical Essays, Vol. II., p. 86.

† For a figure of this vase, and also of the Warwick Vase, see American Journal of Science and Arts, XVI., p. 354-5.

intelligence, are at present in the lower room, along with the two gigantic figures in human form, each being originally divided transversely above the waist. It is now intended to reunite them, when the Nineveh figures receive their final position in the museum. These stupendous pieces of primeval sculpture fill the observer with astonishment, both that they could ever have been constructed, and that they should ever have been extricated from their long forgotten sepulchres, and transported, without the slightest injury, from a position far inland, across wide oceans, to this distant country, which did not begin to emerge from barbarism until ages after the very site of Nineveh had passed into oblivion. These colossal forms are so vast in their dimensions, that man, by the side of them, appears a pigmy; and still they were shaped by human hands, which for thousands of years have crumbled into dust, while their works remain fresh and perfect as when first finished by the chisel of the now long-forgotten artist. Our polite conductor also accompanied us to a lower room, in which are stored a great number of the alabaster panels of Nineveh. They are very large, and are covered by figures in relief, bold and perfect; scenes of war and of peace, figures of master and servant, of monarch and subject, of warrior and soldier, and of victor and prisoner. In fact, they are exactly such figures as are represented in the published volumes of Mr. Layard, the illustrations in which are in no degree exaggerated, but, on the contrary, the figures are copied with the most scrupulous exactness. A hall is in preparation for these precious relics of an age coeval with the dawn of art and civilization, and of which, as extended to our time, the entire Christian era forms but an integral part. At first view, it appears very surprising that they have escaped through thirty or forty centuries without injury; and this is the more remarkable, as they are composed of so soft a material as alabaster. It would certainly have been worn and corroded by the hand of time had it not been protected by the mildness of the climate, and still more by the position of these sculptures, cut off from the atmosphere, and

buried in the crumbled, dry earth, of the buildings when they were destroyed.

TOWNLEY MARBLES.—I found in the British Museum those identical ancient statues, which attracted my attention when I was here in my youth: they were then in Mr. Townley's house in St. James's Park, but had been already purchased for the British Museum, where they are now permanently deposited. Here stand those true antiques, those veritable productions of the Roman and Grecian chisel, uninjured in their substance, although tarnished by time.

Changes, Progress.

Indeed, while opening my eyes again upon England, I seem to myself to have been awakened like Rip Van Winkle, from a long oblivion, from a sleep of more than twice twenty years; or to have returned like the genii of Arabian tales, after a still longer lapse of time, and to find such changes, that in many places I should not suspect that I had ever been there before.

In my own comparatively young country, rapid and great changes are, of course, to be expected; but in this old country, which has been civilized for a thousand years, we might with more probability, expect to find all things to continue as they were. It is however not so; science and art have, in this age, and in this country, given a wonderful impulse to the human mind; and their results, joined with those of a higher moral intellectual and philanthropic character, are already such as no human sagacity could have foreseen, nor can we even now discern the extent of the career of progress which may be coming. A more extended observation, both in England and in other countries, may enable me to judge more correctly on this subject; but for the present I will illustrate my positions by only a few instances.

COURTESY OF MANNERS IN PUBLIC PLACES.—In 1805, and long after, an admirable system of travelling by stage coaches and post chaises,* was in full operation over excellent roads. Civility from the servants was generally purchased, however, by gratuities, unpleasant in the recollection, and annoying from a conviction that you could never do enough to satisfy the expectant, while the regular native traveller often felt that you had done too much.

But now that railroads are introduced all over these kingdoms, the modes of travelling on the great thoroughfares are totally changed.

After mentioning the vast superiority of railroad travelling, as regards speed and convenience, nothing strikes one more than the attention paid to the traveller's safety and comfort, by the agents upon these roads. They are very vigilant to prevent the mistakes into which a traveller is liable to fall—to protect his baggage as well as his person, and in every way, to promote his comfort; and all this with the most courteous and respectful manners, without the usual mercenary motives of servants who expect a reward. This they are, by the most stringent regulations (every where painted in white letters on black boards, and posted up in full view), prevented from receiving, and the traveller is earnestly enjoined, not to offer them any gratuity whatever. That the stranger may more readily know whom to call upon, these men are moreover distinguished by a blue dress, trimmed usually with white or red lace. On arriving at your stopping place, one of the officials procures a carriage for you, will see that your baggage is committed to proper persons, and that you are not imposed upon in the price you are to pay the coachman.

CHANGE OF TREATMENT AT THE BRITISH MUSEUM.—Formerly the museum was not open to the public, and it was not easy to obtain admittance at all. It was necessary to apply

* Dr. Johnson, when riding in a Post Chaise with Mr. Boswell, exclaimed, that there were "few better things in life."

beforehand through some influential friend, and to have your name entered in advance, and even when admitted, after such inconvenient formality, you were hurried through with impatient haste, as only two hours were allotted for all the rooms, and you were hardly allowed to realize your interest in something that had attracted your attention, before you were reminded by your guide, and not always very courteously, that the time for that particular room was up, and you must hasten on to another, and still another, until your two hours were exhausted. If there were 12 rooms (and I believe there were more), you could have only ten minutes to a room, and you were not permitted, except by special favor, to linger where you found most to interest you. Being, on one occasion, in the museum with a late eminent professor of Botany in Harvard University, and he being not one of the most patient, although he was one of the most intelligent of men, was so much chafed by these narrow rules, that he uttered no very cordial blessing upon John Bull. Were he now however here, he would find every thing changed. The museum with all its treasures is thrown wide open to the public, which includes all well dressed and decent people, whether British subjects or strangers. All come and go as they please, and all the officers are courteous and attentive to make every thing agreeable and useful. The visits may be repeated at pleasure, and the observer may linger as long as he pleases in any department.

Departure for the Continent.

March 31, 1851.

Our kind friend, Dr. Mantell, added to our introductions for the continent, various letters and cards to his friends in Paris and Geneva; and another friend, Mr. Henry Stevens, our countryman—the well known sagacious and successful collector of rare and valuable books and MSS.—was so obliging as to arrange for us our railroad affairs. He attended us also over London

Bridge to the Station House, and at 8 o'clock P. M. we were in motion for Folkstone, on the coast of Kent, 80 miles from London. Much to our regret our transit was in the dark, but sleep came to my relief, for the English cars of the first class are so fully padded and cushioned, and divided into separate seats, with supports for the head and arms, that to sleep is as easy as it is agreeable. The light is central in the roof of the coach, and a curtain drawn beneath it protects the eyes.

I was glad when a full stop of the train awakened me to consciousness, and announced to us that we had arrived at Folkstone.

The Pavilion, an ample and good hotel, afforded us a welcome home; midnight found us in our beds, and all was quiet till morning.

PASSAGE TO FRANCE. *April 1.*—A small but snug and rapid steamer (a mere cock-boat compared with our gallant *Baltic*) took us at 9 o'clock out of an artificial harbor; while the town receded from our view—the sooner, as it is situated chiefly in a hollow or comb between two hills, forming a part of the cliffs of chalk that run N. E. towards Dover.

We had hardly time to realize that we were leaving England, when the clearing away of a fog disclosed to our view the coast of France, beginning to loom up in the distance. As we proceeded, the cliffs of both Dover and Calais became distinctly visible; numerous sailing ships met the eye; a steamer was making out from Dover, and another met us from Boulogne; a short chopping sea gave much motion to our small steamer; as the swell increased most of our party began to renew some of the scenes of the Atlantic Ocean, and, as they thought, with more inconvenience, occasioned both by the peculiar form of the waves and the small size of the boat.

This passage is usually dreaded by travellers and with some reason, for these minute steamers, being pushed out rapidly into the waves, and not carrying any canvas to steady them, are very uncomfortable vessels.

Two hours placed us at the wooden pier in Boulogne, and

as we entered its secure and land-locked harbor, relief came most acceptably to our suffering companions.

Boulogne.

As we approached the coast, the hills around the town rose agreeably into view, and the tall column erected by the army of Napoleon, with a bronze statue of the emperor on the top, arrested our attention. The column is 164 feet high, and the statue 16 feet. In the summer of 1805, the grand army (d'Angleterre), then reported in England to have been composed of 250,000 men, and admitted to have been 180,000, was assembled on these heights waiting orders to embark.

There is no doubt that the intention was seriously entertained by Napoleon, but its execution was prevented by the coalition between Russia, Austria, and England, brought about by the negotiations of Mr. Pitt, which caused the French emperor to break up his encampments here, and to march his army into Germany.

I was witness to the intense anxiety felt in England at that time, particularly in August and September. It gave all London a serious aspect. All members of military bands were required to hold themselves in constant readiness, and as I travelled from the Land's End in Cornwall, to the Nore at the mouth of the Thames, I saw that preparations had been made by piles of combustibles upon the hills, to give notice of the landing of the enemy. All vehicles, even those of the farm, were in requisition for the transportation of troops, to bring them from all quarters promptly to the invaded point.

But Napoleon and his grand army have passed away, and England remains in security. Her women, like those of Sparta, have never seen the smoke of an enemy's camp, and almost 800 years have elapsed since the Norman invasion, the last of any moment which England has experienced. Napoleon

caused a basin to be excavated to contain his flotilla of 2,400 transport boats. It is asserted that the drill of discipline had become so perfect that 25,000 men could be embarked in 10½ minutes, and again disembarked and drawn up on the shore, in 13 minutes more. It happened to me, in October 1805, to pass from England to Holland, in one of the gunboats of Napoleon's flotilla, which had been captured by the English and converted into a packet. It was then navigated by the Dutch.

Of the almost 30,000 inhabitants of Boulogne, 7,000 are English. We had only a transit through Boulogne, and of course there was no opportunity to observe the interesting objects in the place. The aspect of every thing was novel. There were clumsy black-looking boats plying the harbor—a peculiar national physiognomy and costume—numerous soldiers were on the pier, the custom-house officers were at hand—men and women were ready, but not in a troublesome manner, to do all sorts of services; an intelligent commissioner speaking English, and proffering needed assistance; and there was a polite although exact inspection of our passports. All this passed rapidly, and our baggage was cleared without examination, because I was bearer of dispatches from our minister in London to our minister in Paris. We not only had nothing to complain of, but our reception made an agreeable impression.

We had time for refreshment at the station house, where English was spoken. Excellent rolls of new bread and sweet new butter were very acceptable, and at noon, with fine weather, we were on our way to the Capital.

BOULOGNE TO PARIS.—The roads were excellent, and so were the cars—but over a part of the way there was a swinging vibratory motion like that of a rolling ship.

Geological sections in the chalk were numerous along the road. Doubtless the chalk is continuous beneath the channel, being only an extension of the same formation seen in England. The channel is indeed only a submerged valley of mod-

erate depth (four to five hundred feet). Once it was, without doubt, connected as dry land with the continent.

On leaving Boulogne we saw, on our right, hills of sand stretching along the coast as far as vision could extend. They were evidently tossed up by the united action of winds and waves, implying, of course, a sandy sea margin. They reminded me forcibly of similar accumulations along the coast of Holland. In that low-lying country they are, on some parts of the coast, the first objects discerned on coming in from sea, and appear to rise out of it. These sandy dunes on the French coast contained small arms or bays of the sea, which were separated from it by the sandy barrier, and upon these waters fishermen were plying their boats, forming a small inland fleet of puny craft.

Most of the country through which we passed on our ride of almost 200 miles to Paris was beautiful; in general it was under good culture, and as we advanced it became almost a garden, both in cultivation and beauty. Indeed nothing can exceed the beauty of much of the rural landscape—not even England itself; not only the most intense and lively verdure was almost every where apparent—but as we drew nearer and nearer to Paris, the country became highly picturesque, with gently swelling hills and lovely vales.

With the opening spring, cultivation was every where in progress; the ploughs and carts were drawn by horses. The laborers were generally men and boys, but we sometimes observed women in the fields.

The vines were beginning to be dressed; we were told that they are laid down in winter; hemp was exposed on the ground, preparatory to extricating the fibre from the wood, and every thing in the rural prospect indicated peaceful industry.

The villages were numerous. The houses were often humble structures—low, and almost obscured by thatched and grass-covered roofs. Windmills are numerous in France. There were more hedge-rows than we had expected to see; we saw no large trees, but there were numerous avenues of poplars, young,

tall and slender, planted evidently for fuel. Terraces were not unfrequent, and often a raised mound ran between the fields, apparently as a dividing boundary between different proprietors.

In a rapid railroad progress, it is in vain that we attempt to enumerate villages; they fly by us and we by them like shadows, and it is only where there is a station demanding a few moments of repose that we can say *we are here*; for when we are in motion we can hardly use this expression before we are *somewhere else*. At one of the breathing places, we were allowed to realize that we were in *Abbeville*, "an industrious manufacturing town of 17,582 inhabitants." Here is a splendid cathedral which we saw at a distance. In this place, some American and English youth have been in early life educated, and several within my knowledge. Two out of three in mature life ceased to be Protestants and became Catholics; the seed sown in the youthful soil at Abbeville lay buried long, but at last vegetated in America.

At *Amiens* we made a longer delay, and although we could not leave the station house, we could see the vast and magnificent Cathedral, and the tall chimneys of the numerous manufactories. This being a place where several railroads meet, a splendid station house, chiefly of iron and glass, is provided for their accommodation. "Amiens contains 46,129 inhabitants," and like Abbeville it stands upon the river Somme, which is here divided as it passes through the town, into eleven branches, of great use in turning the wheels of the manufactories. Peter the hermit was born in this place, and here was concluded in 1802 under Napoleon the celebrated but short lived "*peace of Amiens*."*

At *Amiens*, the conductors and other officers of the railroads wore a blue uniform, and their deportment was gentlemanly, with a kind and obliging manner.

* By Joseph Buonaparte for France; Lord Cornwallis for England; Chevalier Azura for Spain, and M. Schimmelpennick for Holland.

As we drew near to Paris, St. Denis appeared on our right ; it was in former times the burial place of the French monarchs, but in the fury of the early periods of the French revolution the sepulchres were sacrilegiously rifled of their poor remains.

After a delightful day, the sun, which had risen upon us in England, now sunk in the west at the moment we were passing through the gate of St. Denis, in the wall built by Louis Philippe, and in a moment more we were in Paris.

Our dispatches again cleared our baggage with only a slight notice, and on emerging from the door of the building, we met our faithful friend and correspondent, Mr. Hector Bossange.

Paris.

April 1, 1851.

Thus happy was our entrance into Paris under the guidance of an experienced Parisian gentleman, well known also on the other side of the Atlantic, and wherever known, beloved for his benevolence, and esteemed for his noble spirit of active usefulness.

An omnibus conveyed us through the swarming streets of the French capital to the temporary home engaged for us by our friend. It was in the *Hotel des Princes, Rue Richelieu*, near the *Boulevard des Italiens*.

There were reserved for our party four bed-rooms and a neat and genteel parlor, all on the third floor, as we should say at home, the first as they style them here. The price for the rooms and attendance was seven dollars a day ; and our food we were to obtain in the house, or at a restaurant, at our pleasure. Thus you can live more cheaply or luxuriously as you choose. We arrived in early evening twilight ; and, after a slight repast, some of us made our first excursion, which was into the *Boulevard des Italiens*.

The Boulevards, within the city, are on the site of the ancient walls of Paris, which were demolished in 1670 by order

of Louis XIV.; and the space which they occupied has thus become a spacious street and promenade, retaining only in its name, (rampart,) an allusion to its origin.

The Boulevard des Italiens is the most splendid in Paris; and it being now evening, the shops, lighted by gas, made a most brilliant appearance. Rich productions of the arts adorned their windows. We could not resist the attraction of one that was filled with the most perfectly beautiful clocks, the figures on which, chiefly small gilded statuary, were wonderfully diversified in their forms, and both designed and executed with the utmost elegance and grace.

The side walks on the Boulevards are so wide that, in fine weather, innumerable loungers occupy the chairs, which are arranged in groups, and for the use of which they pay two sous.

The Boulevard was thronged on this fine evening with pleasure carriages, and its promenades with pedestrians of both sexes. Most of them had the tranquil air of people walking for amusement, and not the anxious features and hurried gait of Broadway, in New-York, and of the thoroughfares of other American cities. The Boulevards present a scene of great animation, and the cafés and restaurants, blazing with light, and alive with people, are a moving panorama.

PUBLIC WALKS AND GROUNDS. *April 2 to 8.*—We have now seen the principal public walks and grounds—the Place de la Concorde, formerly the Place de la Revolution, the Champs Elysées, the Champ de Mars, the Gardens of the Luxembourg and of the Tuileries, the Garden of Plants, the grounds of the Louvre and Carrousel; those of the Ecole Militaire and of the Hospital of the Invalids, and also other areas of ornament and pleasure, which are more limited in extent.

These grounds are generally occupied by trees, which will soon be covered with leaves, that are now just beginning to put forth. The ancient trees have been cut down in the various struggles of war and revolution; therefore all the trees here, except the cedar of Lebanon, and perhaps a few others in the

Garden of Plants, are small, and much resemble the second and third growth of our forests, after the primeval forests have been cut off.

The Parisian grounds are truly magnificent, both for extent and ornament. Grand palaces, and other buildings of massive architecture, and many of them ancient, arrest the attention on every side. The grounds are adorned by innumerable statues of the gods and goddesses of Heathen fable—Neptune, Tritons, Nereids, Nymphs, Bacchus and Venus, figures of animals, lions, &c., meet you on every side. They are generally colossal, and are often mounted upon pedestals.

Many of these statues are arranged around fountains, whose jets rise and fall in refreshing showers, and agitate flowing basins of water. Sometimes the water runs from the mouths of lions, at other times from perforations in the rim of a vast basin, and again female figures hold in their arms dolphins, from whose mouths the water gushes and spouts more appropriately than from a lion's jaws.

PLACE DE LA CONCORDE.—This place is of vast dimensions, and is extremely grand. The ancient and venerable column of Luxor is erected in the centre, on a high pedestal. This granite shaft is, doubtless, older than any human records, except those which it contains, still fresh and distinct, cut on the beautiful red granite. It is a monolith, and the inscription records Sesostris as the founder, 1550 years before Christ, or 3400 years ago. It was given by the Egyptian government to France, was transported at an expense of 400,000 dollars, and erected October 5, 1836, in presence of Louis Philippe and his family, and also of the public functionaries, and of 130,000 people. The height of the column is 72 feet 3 inches; breadth at the base, 7 feet 6 inches, and its weight is 500,000 pounds. The total height of the plinth and pedestal is 27 feet. This place has been the scene of many tragical events. During the rejoicings in honor of the marriage of Louis XVI., a panic, occasioned by the fireworks, caused the death of 1200 persons, by trampling, and 2000 more were wounded.

The Bastille, which stood in a remote part of the city, was destroyed in consequence of a collision which took place here between the military and the people. Louis XVI. was guillotined here January 24, 1793, and his queen, Marie Antoinette, October 16; the Duke of Orleans, March 24, 1794. Up to May 3, 1795, 2800 persons had been executed here, including many men who had figured in the Revolution;—Robespierre, Clootz, Brissot, Danton, and many other leaders.

In 1814, the invading armies were reviewed here. Louis Philippe, in his flight, by the western gate of the Tuileries, passed through this square; and here the Constitution (then new) was proclaimed, Nov. 4, 1848.

A vivid impression of grandeur and richness is produced by a view of these public grounds; and it is difficult to realize that blood has flowed here in torrents, in places that now appear so peaceful and beautiful.

In the direction towards and beyond the Elysian Fields, the grand triumphal arch of Napoleon is visible; and in the Carrousel we see, mounted on another triumphal arch, the group of horses that have been, since the downfall of Napoleon, substituted for those that were plundered from the Cathedral of San Marco, in Venice.

Above all surrounding objects rises, in the Place Vendome, near to the Place de la Concorde, the magnificent bronze column crowned by the statue of Napoleon. This column is 135 feet high, 12 feet in diameter, and weighs 300,000 pounds. It is composed of the metal from 1200 brass cannon taken from the Russians and Prussians in the campaign of 1805. The bas-reliefs on the pedestal represent the armor, uniform, and weapons of the conquered troops. On the pedestal are represented the principal actions from the time the troops left Boulogne to the battle of Austerlitz. The figures are of half size, 2000 in number. They run spirally around the shaft, and the scroll containing them is 840 feet long. The figure of Napoleon is eleven feet high. The column is modelled after that of Trajan at Rome, and is one-twelfth larger.

The statue of Napoleon in imperial robes was melted down in 1814 to form a part of the equestrian statue of Henry IV., but was replaced by Louis Philippe, May 1, 1832, clad in military costume, shrouded by crape. From the summit of the monument, which is reached by a spiral staircase, there is a splendid view of the capital, and admission is obtained through one of Napoleon's veterans, who keeps the door.

It was a very weak and illiberal feeling, which induced the attempt to dishonor Napoleon's memory by taking down his statue, and by cutting out the letter N from the mile stones and other monuments commemorative of his power. It was not only impossible thus to obliterate from the minds of the people the memory of their great Emperor, but the very effort tended only to perpetuate the remembrance of one, who having been in fact their splendid leader during almost twenty years, had already passed into the monumental records of history, where, with all his astonishing traits, he must ever remain in bold and conspicuous relief.

HOTEL DES INVALIDES, CHAMP DE MARS.—In a ride with our friend, Mr. Bossange, to the fountain of Grenelle, we passed both these places. In the Champ de Mars, an immense field, between the Ecole Militaire and the city, we saw several thousand infantry of the regular army, engaged at their drill. The area of ground is large enough for 50,000 men, and the different corps now distributed about it, here and there, looked like the disjointed fragments of a great army after a battle. They wore the usual fatigue dress of the French army, red pantaloons, under a tightly fitted blue frock, belted around the waist.

The interfering sounds of the many voices of the different captains, giving aloud the word of command, produced, in the air, an incessant discordant hum, and the ear could not be inattentive to the confusion, while the eye glanced rapidly over the different squadrons.

Here Napoleon often reviewed his armies, and this celebrated field is strongly associated with his memory.

There is no part of the population of Paris which strikes me so painfully as the young soldiers. It is asserted that there are now in the different stations, in and around Paris, 150,000 men under arms, and we meet them constantly in the streets. There are among them very few men with silvered hair; most of them are young, the greater part very young; and their situation is most undesirable.

I am assured, on high authority, that they receive five sous, or cents, a day; four are taken for their support, and seven cents a week remain; so that all that the soldier has to expect is merely to exist, with the chance of being slain in battle, or shot for desertion.

Many of them have vacant and discontented faces, expressive of very little intelligence.

The Hotel des Invalides was instituted under Louis XIV., and is a hospital for the invalids and veterans who have passed beyond the ability to do military duty. Many of the old soldiers were walking about, or sitting idle, with a vacant air, and not a few of them with broken health and mutilated limbs. One, who had both legs replaced by wood, was sitting by the gate, and being asked where he lost his limbs, he replied, "In Russia;" by the cold? "No; by the cannon!"

As the Russian campaign terminated nearly forty years ago, of course all the survivors are old men, and some are in extreme old age, tottering towards the grave.

I was so strongly impressed by similar scenes at Chelsea Hospital, near London, in 1805, that I wrote as follows: "But the life of a common soldier is in every part of it deplorable. His pay is a song, his service is severe, his privations are great, his dangers frequent and imminent, his death undistinguished and unlamented, and if he survive, his old age is dependent, vacant, and miserable."

Napoleon's remains, after being removed from Elba, were interred beneath the dome of the Hotel of the Invalids. A magnificent tomb is now being erected over his ashes, but strangers are at present excluded, unless admitted by special favor.

The entire edifice of this military hospital now covers 16 acres of ground. Its length is 612 feet, and it can accommodate 5000 persons. Those who have been disabled by wounds, or who have served 30 years, may claim a refuge here.

On the terrace, in front of the hospital, there are sixteen beautiful pieces of artillery, of bronze, highly ornamented; trophies taken from various nations. There are also other sixteen guns, captured at Algiers and at Constantina; they are covered with Arabic inscriptions and decorations. On approaching for a closer inspection, we were civilly reminded by a veteran that we must not touch them. Most of these pieces were of great length—of course not cannon for field service, to be moved rapidly in battle—but intended for permanent fortifications.*

ARTESIAN WELL OF GRENELLE.—This fountain is famous the world over, and of course it was to us a very interesting object. It is not far from the Hotel des Invalides, and was undertaken chiefly with reference to the great slaughter-houses (abattoirs) in its vicinity. It was begun January 1, 1834, and the boring was prosecuted during seven years and two months. It opened with a diameter of 12 inches; at the depth of 1300 feet it was contracted to 6 inches. They struck the water at the depth of 1800 feet, and the entire depth is 2000 feet, or nearly two-fifths of a mile. The water rose first in a fine thread, but soon after it came so rapidly as to injure the machinery. It rose to the height of 112 feet above the surface; high enough to flow into the attics of the most lofty houses in Paris, and into many of its towers. The entire depth of the boring

* In Sir Francis Head's late work, "A Faggot of French Sticks," there is a very interesting account of the interior of the Hotel des Invalides, and of a grand ceremonial there in honor of the memory of Napoleon. Two thousand veterans, who had served under Napoleon, were drawn up on that occasion, dressed in the costume of the time of the empire. Among them was a little fiery Arab Mameluke, one of the body-guard, with four bullet holes through his cap. Napoleon's tomb had cost, at that time, 6,163,324 francs, of which 1,500,000 was for the marble alone.

is five and a half times that of the dome of the Hotel of the Invalids, and more than five times that of the cross on the summit of St. Paul's, in London. In a diagram of the strata, seen in section, the cathedral of Strasburgh, and the church of St. Peter, at Rome, are figured at the bottom on the level of the subterranean fountain, and they appear very humble, compared with the great distance to the surface of the ground.

The flow of the water was equivalent to 600 gallons in a minute; 500,000 gallons in 24 hours; and I have not learned that the quantity is diminished. When we were there, it flowed bountifully over the top of the tube, and with a force that would doubtless have raised it to the full height, although at that time the upper part of the tube had been removed for repairs. It had collapsed, and a new tube was about to be inserted; it was 21 inches wide at top and 7 at the bottom; but the new tube was to be reduced to 5 inches. It is now, and was formerly, made of galvanized iron.

The temperature of the water at first was $83\frac{3}{4}^{\circ}$ of Fahrenheit, and it is now stated to be 85° —a degree of permanent heat far exceeding that of midsummer in Paris. Indeed it is so warm—as was stated to us—that it does not answer for the use of the slaughter-houses, as was at first proposed, and they are compelled* to resort to water from other sources. It was quite warm to the touch, when a hand was immersed in it. The labor attending this boring was immense; and great difficulties were encountered. The boring instrument broke several times, and fell in. This happened at the depth of 1335 feet, and it required incessant labor during 14 months to recover it. The government, at whose expense it was prosecuted, was, at times, nearly discouraged.

It was proposed, in 1848, to sink an artesian well in the Garden of Plants, to the depth of 3000 feet, and it was calculated by MM. Arago and Walferdin, that the water would have a temperature of 100° Fahrenheit; "sufficient not only to cheer the tropical birds and monkeys, the hot-houses and green-

houses of the establishment, but to give warm baths to the inhabitants of Paris."

The Well of Grenelle has afforded important aid to Geological theory, by demonstrating the increasing temperature of the earth as we descend, and numerous other cases of a similar character have added much to the weight of evidence on this subject, so that the generalization is now sustained, namely, that after we descend below the influence of climate, the temperature of the earth in all countries increases regularly. The ratio inferred from the Well of Grenelle, and from a still deeper one at Mondorf, in Lumbourgh, is one degree for every 50 feet of descent. It may vary in different countries, but if we assume the ratio just named, water would boil at two miles in depth; rocks would be ignited at ten miles, and melted at twenty-five, or more. That there is much melted rock in the earth is certain.

We were presented to M. Cordier, who first introduced the theory of the regular increase of the internal heat of the earth. He was one of the savans who accompanied Napoleon to Egypt. His modest little book, announcing his views, has produced a great and permanent impression on the scientific world. Although not far from fourscore, he is full of vivacity; his manners are kind, and his vigorous appearance would suggest a period of life much earlier.

GARDEN OF PLANTS.—We have several times visited this very important and most interesting establishment. Nothing but an actual inspection of its immense and unrivalled treasures can convey an adequate idea of its riches. An excellent account of it is contained in Galignani's Paris Guide. A rapid survey of the garden during two rather extended visits, enables me to say, that the description above referred to is in no degree exaggerated, and I have no doubt that it is perfectly correct. From it, and from my own observations, a few facts may be cited.

The garden was founded by Louis XIII, in 1635; and it has been patronized, and its treasures augmented, by almost

every successive government; nor has it been subjected to the ravages of war or of domestic revolutions. Among its professors are names illustrious in science, and known wherever it is cultivated or respected. Buffon, Vaillant, Jussieu, Tournefort, Faujas de St. Fond, Daubenton, Fourcroy, Brongniart, father and son, Cuvier, Valenciennes, Milne Edwards, and many more, were, or are, among its ornaments. There are fifteen professors, fifteen assistant professors, two masters in drawing and painting, one librarian, and numerous subordinate officers. Lectures are given on mammiferæ and birds, reptiles and fishes, molluscs and zoophytes, insects and crustaceæ, comparative physiology, anatomy and natural history of man, comparative anatomy, general chemistry, practical chemistry, mineralogy, geology, botany, vegetable physiology, rural botany, cultivation of plants, and physics applied to natural history. The lectures begin in April, and end in autumn, two or three courses going on together.

Among the professors to whom we were introduced were M. Adolphe Brongniart and Milne Edwards. With M. Alexandre Brongniart, the late eminent geologist, I had for many years been honored by correspondence, and by very useful services, and I had occasionally interchanged letters with this his son. His reception of us at his apartments in the garden was very kind, with a gentleness of manner that was very winning. The same remark is applicable to M. Milne Edwards; and with him we enjoyed an additional advantage. He speaks English fluently and perfectly, and without the slightest peculiarity of accent. His parents were English, which explains his familiarity with the language; but he was born in Paris. M. Edwards occupies the house of the lamented Cuvier; we saw the very rooms in which he pursued his researches, and the apartment in which he died.

With Professor Edwards we had repeated and very gratifying interviews, and his kindness could not be exceeded. We had agreeable intercourse with several other professors and savans, and all of them exhibited those amiable manners which

are so marked a trait of the Parisians. Among the men of science in that city we met with only a solitary instance of cool manners, but without rudeness.

The Garden of Plants was munificently patronized by Napoleon and by Charles X. Large sums are annually voted by government for its support; nor was it ever more flourishing than at present. It contains—

1. A botanical garden, with spacious conservatories.
2. Several galleries devoted to zoology, botany, and mineralogy.
3. A menagerie rich in wild animals.
4. A library of natural history.
5. An amphitheatre for gratuitous lectures on all branches of science. This is capable of containing 1200 persons, and 1800 are in attendance on the various courses.

The gardens are of vast extent.

The School of Botany contains the plants whose characters may be known by the tickets attached to them. The red tickets denote medicinal plants; the green the alimentary; the blue those for the arts; the yellow the ornamental, and the black the poisonous. On a mound, called the Labyrinth from its intricate windings, there is a magnificent cedar of Lebanon, which was presented to Jussieu by Collinson, of England, in 1734. It is still in full vigor. At six feet from the ground, it is ten and a half feet in circumference. Its broad-spreading horizontal branches, so numerous, and thickly studded with sombre evergreen spiculæ, extend far and wide, shading a large area, and enabled us to understand and to realize how grand and glorious was once the venerable Libanus, adorned by forests of its own native cedars. It was a source of satisfaction to me, while waiting the arrival of my companions, to sit contemplatively under the shadow of this princely tree.

Near to this cedar of Lebanon there is a collection of almost all the evergreens known in the world; it includes also all those usually brought out (as now) in fine weather, for sun and

air. In summer, two Sicilian palms, twenty-five feet high, stand at the door of the amphitheatre.

More than 12,000 species of plants are cultivated in the garden. The conservatories are warmed by hot water; and so elevated are the roofs as to afford room for the upward growth of the tallest tropical plants, including mature living palm-trees.

There is in a sunken inclosure a splendid display of flowering shrubs; and there are in the garden some of the most beautiful trees of Australia, Cape of Good Hope, Asia Minor, Barbary, and the Hymmetia.

IN THE ZOOLOGICAL DEPARTMENT there is great variety of animals. There are asses and zebras, the latter in fine condition; sheep from Thibet and other countries; goats and antelopes and gazelles; elephants; the bison and Asiatic buffalo, dromedary, capybaru from Brazil, and a young rhinoceros.

The elephants are easily conciliated by apples, and there is an active sympathy between them and the young visitors. When the clock strikes three—this being the time when the animals are fed—the elephants voluntarily retire to their dens.

There are various species of deer, and black and white bears, whose gambols are amusing to the crowd. There are two fine lions, a lioness, a jackal, leopards, and hyenas. Here are also camels, and the lama of South America.

Among the animals, the *quadrumanæ*, or monkey tribe, attract the most attention. Their quarters open into a wire house, in the form of a huge bird-cage, within which they sport.

Reptiles are here in great numbers, and those from hot climates are protected by glass cases and artificial heat, and the boas by blankets. Among the reptiles we noticed a fine brood of young alligators, presented by Dr. R. W. Gibbes of Charleston; and the names of several other American donors were attached to specimens of other living animals.

THE CABINET OF COMPARATIVE ANATOMY.—Cuvier's peculiar department of labor and glory is probably the most ex-

tensive and complete in existence. It contains every thing, from the humblest animal up to man. It is in vain to attempt to particularize where the field is vast as the world. The skeletons are admirably set up, and in general they are in high preservation. There are skeletons of the human species from all quarters of the globe. There is the skeleton of Soliman el Khaleby, a learned but enthusiastic young Syrian, by whom General Kleber was assassinated. There are fine specimens of fossil plesiosaurs from England, and a magnificent Cashlot whale is suspended in the hall at the entrance of the rooms.

THE GALLERY OF ZOOLOGY of Preserved Specimens is equally rich and various. There are upwards of 10,000 specimens of birds belonging to 2500 species. The mammalia are 2000, representing 500 species, and the total number of specimens is estimated at upwards of 200,000, of which there are 5000 fishes and 2500 species. The tallest of the giraffes that are here had lived seventeen years and a half in the menagerie. "The arrangement of the specimens is so systematic and progressive, that, beginning with the lowest manifestations of animal organization, as in the sponge, we can follow the chain of nature, link by link, till it arrives at its highest perfection in man."

Sir Francis Head, in his lively manner, remarks: "I walked among scales of serpents, shells of tortoises, skins of animals, and the plumage of birds, whose bodies were all gone, and whose joyous lives had long been extinct; all had been the captives of man; all had died either in his hands or by his hands; and although their variety was infinite, their congregation astonishing, and the method of their arrangement most admirable, yet in point of beauty, whether of a poor bird with wings extended always in the same attitude, of an animal with glass eyes and puffy legs, of a gouty-looking fish immovably floating in spirits of wine, was but an unsightly mockery of the living creatures, with which it has pleased an Almighty Power to ornament and animate that tiny speck of his creation on which we live."

THE COLLECTION IN MINERALOGY AND GEOLOGY is also vast, various, rich, and beautiful, and arranged and ticketed most skilfully and usefully.

In general, the name, the locality, and the donor (when the specimen is a gift), the authority and the time of reception are on the specimens.

Although I cannot enter into details, I must not omit to remark that the gems are very fine and many of them are of surpassing beauty. A soldier stands, in full armor, near the case containing the gold and the gems.

The stupendous Quartz Crystal, presented by Napoleon when commanding the army of Italy, in 1795, is here; although the prism is wanting, the pyramid alone weighs 800 pounds, and is transparent and beautiful. The *topazes* are particularly fine. The remarks upon this collection are strictly applicable to that of the school of mines which, on another occasion, and indeed on several occasions, we were permitted to see in great detail, the cases being opened for us. These collections of minerals are among the most precious in existence. The number of mineralogical and geological specimens in the Garden of Plants exceeds 60,000.

The collection of the celebrated Abbe Hany is the first object that meets the eye on rising the grand staircase; it is mounted in a pyramidal glass case, and with the same labels and arrangement which it received from its illustrious author. The specimens are very small, but excellent. This unique collection is one of the recent acquisitions of the Garden of Plants, having lately been repurchased from England.

THE GEOLOGICAL collection is very fine. Among the most interesting specimens are those obtained by Cuvier from the tertiary formation which underlies Paris. It was not in our power to visit Montmatre, which is the principal repository of the skeletons of those earliest terrestrial animals hitherto discovered in the fossil state; which from their antiquity have been called *palæotheria* (or ancient animals.) The specimens are however so perfect that they at once carry conviction to the

mind, and are seen to be the remains of terrestrial, warm-blooded, air-breathing animals. As I visited this gallery on a subsequent occasion, in company with a distinguished French geologist, I postpone further remarks to that occasion.

IN THE BOTANICAL GALLERY are very numerous and perfect specimens of various woods, cut in vertical and transverse sections, and polished, and a fine collection of the fossil plants of the coal period, arranged by M. Adolphe Brongniart, who has distinguished himself very much in the investigation of fossil botany. From the mines of this country it was my good fortune many years ago to contribute, through the elder Brongniart, to the Garden of Plants numerous specimens of our coal plants. The total number of dried plants in this collection exceeds 350,000, and of woods, fruits, and grains, more than 4300. There is a table nearly seven feet in diameter, made from a single piece of the boabab tree. The tree from which it was cut must have been fourteen feet in diameter.

There is a very valuable collection of fruits, preserved in spirits of wine, and a collection of foreign fruits, modelled in wax and plaster. There are herbals of various countries; and the ancient herbal of Tournfort, labelled by his own hand, is preserved here.

THE LIBRARY contains 30,000 volumes, and 15,000 pamphlets. The manuscripts containing magnificent paintings of fruits and flowers upon vellum, and original designs, fill 90 portfolios, and contain upwards of 6000 drawings. It was begun in 1695.

Pere la Chaise.

This celebrated cemetery, so well known throughout the civilized world, is named from the confessor of Louis XIV., who resided here; and for 150 years it was the country-seat of the Jesuits. The ground contained originally 42 acres, but its pre-

sent extent is nearly 100 acres. The late M. Alexandre Brongniart was appointed to lay it out, and bring it into order. It was consecrated in 1804, and the first grave was dug May 21st of that year. The cemetery at New Haven, the first orderly establishment of that kind in North America, was opened seven years earlier, 1797. The Père la Chaise is entirely inclosed by a wall. The beautiful situation of the spot, surrounded by valleys and slopes, and commanding an extensive view of the picturesque and glowing landscape, makes it, particularly in summer, a great resort of strangers, as well as Parisians. This is the favorite place for the interment of the most distinguished personages; and their monuments are often elegant in form, and grand from their magnitude. There is great sameness in the general style and appearance of the monuments; and they are often so crowded that much of the good effect of a rural cemetery is lost. A Protestant unaccustomed to the chapel form of Catholic mausoleums, is very forcibly impressed by the frequent recurrence of candlesticks, images of the virgin, crucifixes, and votive offerings, often costly, with which the altars and walls of these chapel-tombs are adorned, and they are visible through the lattice door. Most of them are inclosed by iron railings, within which are planted flowers and shrubs, etc.; and there are near by, retired seats for the accommodation of mourning friends. The ground is divided into paved streets; and the deep ruts worn in them by funeral processions attest the frequency of these solemn pageants. Pleasure carriages are not admitted.

Among the numerous monuments to the memory of distinguished persons, I can mention only a few. That to Heloise and Abelard is very splendid. It is a chapel, in the Saxon style of the thirteenth century, and was formed out of the ruins of the celebrated Abbey of the Paraclete, founded by Abelard, and of which Heloise was the first abbess. It is 14 feet long by 11 broad, and 24 high. It is adorned by columns and other architectural embellishments. The celebrated parliamentary orator, Casimir Perier, minister in 1832, is commemorated by a statue, a fac-simile, I suppose, of his form and features. It

presents a noble mien and fine countenance, and is erected upon a lofty and richly decorated pedestal and basement.

Several of Napoleon's marshals, who escaped death in battle, have found quiet tombs in this secluded ground—a boon denied to the tens of thousands whom they led to fatal conflict.

Here we find Massena, Suchet, St. Cyr, Macdonald, Davoust, Giobert, Le Febvre and Ney. Ney, however, as he was shot for his return to Napoleon, was left without a memorial except an iron railing around a little garden; a petty, impotent revenge upon the memory of a brilliant general; indeed, it insures celebrity to this grave, for every observer inquires for the occupant of the inclosed ground, and every guide tells the story. Marshal Ney's little cemetery is adorned by cypress laurels and roses; and, as has been well observed, there is more real eloquence in this silence, than in the panegyrics on the neighboring monuments. Here also are the tombs of Benjamin Constant, General Foy and General La Fayette, of Volney and Madame de Genlis. One of the most splendid of the monuments is to Countess Demidoff of Russia; it is in the form of a beautiful temple.

Those whose lives have run parallel with the great events of the age, will see these monuments, not without deep conviction of the vanity of military fame.*

At the bottom of the hill, there is a large space devoted to the poor, who are generally without monuments, and there is an intermediate space where the monuments are of wood.

The general effect produced on the mind by a view of the cemetery is that of pensive solemnity. The scene is, however, a very different one from that which I had imagined to myself. I had supposed that Père la Chaise, although abounding with monuments, was still a wild rural field, with trees and verdure, relieving the solemnity of the place by the vivacity of living green. This is not the fact; it is a crowded necropolis,

* From the meetings of the States General of France, and the flight of Louis XVI. to Versailles in 1789, the great train of events is within my personal recollection.

where the art and skill of man have, in a great measure, excluded the simplicity of nature. Trees and shrubs indeed there are, but they are almost veiled by a city of monuments.

This sacred place has not been exempt from the vicissitudes of war. In 1814, while the allied forces were approaching Paris, formidable batteries were established in this cemetery and the walls were pierced with loop-holes. On the 30th of March the pupils of the school of Alfort successfully resisted two attacks of the Russians, but were overpowered by a third assault. Paris capitulated the same evening, and the Russians bivouacked in the cemetery.

In 1815, while the allies surrounded Paris a second time, interments here were for a time suspended. There is a chapel in Père la Chaise, a plain Doric building, 56 feet by 28, and 56 high.

Père la Chaise is devoted to the interment of the inhabitants of the 5th, 6th, 7th, 8th and 9th arrondissements. There are several other cemeteries; the principal are that of Mont-matre for the north, and Mont Parnassus for the south. Père la Chaise is on the east.

Among the monuments there are some of both Americans and English.

In the cemeteries of Paris there are three descriptions of graves: those occupied in perpetuity, those leased for six years, and those in which the poor are allowed gratuitously a resting-place for five years.

In the "fosse commune," the dead are arranged in layers; an area of sixteen acres, which had been a few years ago completely filled with temporary graves, and the leases having run out, the graves have been covered in some places to the depth of thirty feet, with a bed of earth destined to receive a new stratum of human bodies. There are regular officers charged with the interment of the poor; the corpse is lowered down into a trench, and covered with half an inch of earth; the coffins, like paving stones, touch each other all round; "yet in memory of each, even the very poorest, there is invariably

erected, either over the coffin, or as near it as possible, a little rectangular oak railing, eighteen inches high, inclosing a tiny garden, subsequently ornamented by friends, generally with cypresses or only with a cross." At the end of seven, or it may be of five years, every thing is removed to prepare for a new set of tenants.

The perpetual graves in Père la Chaise already amount to 102,000, and as they may in time come to occupy the entire ground, the city of Paris now declines to give any more perpetual titles; they give instead leases, subject to be renewed; but as the renewal often fails to be made, the titles relapse to the government, as they do also in case the certificate of proprietorship is lost.

I believe that Americans who have expected to find in Père la Chaise a burial-place like that of Greenwood Cemetery, Long Island, or Mount Auburn, near Cambridge, and Laurel Hill, near Philadelphia, not to mention several other similar cemeteries in the United States, are usually disappointed in the first view of the celebrated Parisian cemetery. It wants that splendid picturesque effect that is so conspicuous in several of the new cemeteries of this country; that combination of hills, valleys, waters, groves, and natural winding avenues, among trees and shrubs of nature's planting, which harmonize so happily with the solemnity of the house appointed for all living.

Notre Dame.

This vast Cathedral, of world-wide fame, stands on an island in the Seine, and here was the centre of the old city of the Parisii, in the days of Julius Cæsar. It is more than 400 feet long, 150 wide, and more than 100 feet high to the vaulting of the roof. It has all the characteristics of a vast ancient Gothic cathedral, but it is dark and gloomy, and when we were there it was very cold and cheerless.

At the time of our visit worship was being held in the choir; many were kneeling on the hard, cold stone floor; others were touching the holy water and crossing themselves. To make the consecrated water the more accessible, a plain man (at the Madeleine there were two men) held in his hand a stick, split at the end in the manner of a wood broom; these splintered ends were dipped into the holy water, and each person, in passing out, touched the stick with a finger.

I have neither ability nor disposition to describe Notre Dame, especially as it is inferior in elegance and in its state of preservation to Westminster Abbey and York Minster, in England. Notre Dame has been several times despoiled, by popular inbreaks, and doubtless has lost much of its original splendor. It is rich in important historical associations, not the least interesting of which are those connected with Napoleon I., and if less important, more recent at least has been the marriage of Napoleon III. (1853.)

The Bishop's palace, a splendid establishment, stood near to the cathedral. It was sacked by the mob in 1848, after the bishop had been murdered in the street; the furniture of the palace was broken or carried away as plunder, or thrown into the Seine, the palace was finally removed by government, and not a vestige of it now remains. Notre Dame has magnificent towers, and in them there was formerly a fine peal of bells.

Versailles.

Under the guidance of Mr. B., we visited the palace of Versailles, founded by Louis XIV. A building on this ground had been used by his immediate predecessors as a hunting lodge; but in 1660 Louis commenced converting it into a palace, and, after many additions, it became the royal residence in 1681. For a century or more it was a favorite abode of the kings of France, and no expense was spared upon its decorations.

In 1792, the palace was devastated by the revolutionists. Every thing convertible into money was sold for the nation, and but for Napoleon, it would have been completely destroyed. It was said that he would have made it his residence had it not required fifty millions of francs to put it in order. Louis XIV. expended upon it forty millions of pounds sterling, and Louis Philippe fifteen millions of francs. The latter restored it to splendor, and labored to concentrate in it splendid illustrations of the glories of France.

All the painted ceilings, gildings, &c., were restored, and new galleries and saloons were formed. An immense series of paintings, sculptures, and works of art, illustrative of every important event that has reflected honor on the annals of France, now fills the splendid halls of this noble palace, forming a historical museum that has not its parallel in Europe, or in the world. It would be a vain attempt were I to endeavor to describe the palace. Its buildings and grounds are of very great extent. It is said to contain 137 grand saloons and lesser apartments, which are furnished with 10,000 pictures.

Four hours are allowed for the inspection of the rooms and of their contents: and this time we employed most industriously, passing through the apartments with painful rapidity. No sooner were we attracted by a room, or interested in a picture, than we were hurried on to another, and another, and another apartment, until our faculties were tired, and our eyes satiated with the brilliant display. Many of the pictures are very large; and it appeared, from the delineations on some of the larger ones, which were in an unfinished state, that the canvas was hanging on the wall where the pictures now are when they were painted.

Most of the pictures are battle scenes, from Clovis, Charlemagne, and the Crusaders, down to Napoleon's wonderful career, and even to the war in Algeria. The figures are of such dimensions as generally to appear of the size of life, notwithstanding the distance and elevation from which they are seen. It is painful to observe how large a part of human effort has been ex

pended upon war. There are, however, many pictures of quiet scenes, and an immense number of portraits. Although the productions of the French pencil are here of unequal excellence, there are certainly among them no small number of fine pictures.

Here also we see a vast collection of statues in marble and of casts in plaster, and a great series of medals and coins. The pictures of royal residences represent many that no longer exist, and with them are illustrations of the costumes of past times. Some of the galleries in the palace are 300 feet long, and are filled with statuary. In order to see all the works of art, it is necessary to walk three or four miles.

We looked into the private theatre and chapel. Prayers and divine service were held in the one, and plays acted for the royal entertainment in the other; and here members of the royal family sometimes appeared on the stage. The confessional of Louis XIV. is a small room, by the side of which is a window, where a soldier was always stationed while the king was at confession; and the very chair in which his confessor, Père la Chaise, sat, and the very cushion on which Louis XIV. kneeled, are here in their places. Strange infatuation! The confessor who urged and obtained the revocation of the edict of Nantes, which was to let loose the dogs of persecution upon the Protestants, and the pliable monarch who yielded himself to license this cruel work of death on thousands, and of banishment upon many thousands more, could here meet in a private act of devotion while they were about to violate the first laws of humanity!

The bed in which the king slept, and in which he died, are still to be seen in his bedroom, and no one has since slept in that room.

The private room of Antoinette, queen of Louis XVI., has a small door in the side, through which the queen escaped in October, 1789, when the palace was forced. Through this door she was compelled to fly in her night dress, while a faithful officer of her guard was killed on the spot. All these melan-

choly places we saw, and also the gallery in which the king and queen and their children appeared, October 6, 1789, to appease the fury of the Parisian mob, many thousands of whom filled the immense court of the palace yard. In this gallery La Fayette also appeared with them, and in sight of the people kissed the queen's hand, to testify his loyalty and fidelity. It required no small share of courage and firmness thus to appear as the friend and protector of the royal pair, and their children, in the face of an infuriated multitude. This palace is associated with many other interesting events.

In the time of Louis XIV. it was the scene of more splendor than any palace in Europe. Although it was constructed, and has been maintained at an immense expense, it appears to be neglected by the present government. Some of the pictures are perishing from dampness; and in a few—some of them of large size—the colors, from the same cause, are peeling off from the canvas.

It is to be regretted that so splendid an establishment as a monument of the arts and of the men of a gone-by age, should not be preserved from destruction.*

I had no opportunity to see the splendid play of the waters; the fountains were undergoing repair, besides they play only on Sundays, which is the great gala day of the French, and when vast numbers of people, as in past times, resort to Versailles for amusement. In the time of Louis XIV., XV., and XVI., there were here extensive military establishments, which are now in decay. There was a manufactory of arms, which produced annually 50,000 stands; but it was plundered by the Prussians, when the allies took Paris in 1814. The court of the palace measures 800 feet by 500, and is paved, as the courts of the French palaces generally are. In this court there are statues of great men, Colbert, Turenne, and others, of ultra-colossal size. In the centre of the court there

* It is stated that the new government of the emperor Louis Napoleon is very attentive to the various palaces, adorning and restoring them in a lavish manner. April, 1853.

is an equestrian statue of Louis XIV., also of enormous dimensions.

Versailles, nourished by the power, influence, and money of Louis XIV., became a splendid city of 100,000 people; but the population has now dwindled to 30,000. Louis XVI. was an excellent mechanic: happy had it been for him had a shop instead of a throne been his lot. We saw a good door lock of his construction, which was still serviceable; and there is yet to be seen a brass meridian made by him, and inlaid in the floor. Several of the royal carriages are here in a perfect state of preservation. They are gorgeous in the extreme, being all covered massively with gilded carving, and superbly lined.

We came from Paris, four leagues, on one railroad, and returning on another, we passed the place where a few years ago Admiral d'Urville, and other distinguished officers and citizens, and many other persons, perished by a railroad accident, still fresh in the memories of all. That accident was rendered vastly more destructive of life from the doors of the carriages being locked—an absurd and unjustifiable custom still existing on the Continent. In England, they lock only one side of the cars, that towards the parallel track; and the reason assigned is, that passengers are thus protected from the danger of being crushed by getting out on the wrong side. I should have remarked, that the water for the supply of the fountains at Versailles is forced up from the Seine, a distance of more than twelve miles, merely for this display. The original expense was very great; and it was stated to us by an intelligent Parisian, that 50,000 lives were sacrificed in the various labors of excavation, as the country was then full of malaria.

I have mentioned the revocation of the edict of Nantes by the influence of Père la Chaise over the mind of Louis XIV. The Huguenots were the Puritans of France; and in addition to the multitude who perished by the sword, and other violent means, 100,000 families escaped to England and other foreign lands, and not a few to America, carrying with them every where their useful arts, their pure principles, and their good

habits. Some of our best families in the United States sprang from the French Huguenots, especially in the State of New-York and in South Carolina. Many honored names in those States and elsewhere in America, can claim this origin.

THE ARC DE TRIOMPHE.—This triumphal arch is one of the most wonderful conceptions of that wonderful man, Napoleon. It was begun by him, but finished by his successors. This stupendous fabric strikes one with astonishment; and after we had opportunity to compare it with the triumphal arches of the Roman emperors, we were still more impressed with its grandeur. Dimensions are indispensable, if we would produce in others any correct conceptions of structures or space; but they fail to impress the mind as does the actual vision, and this is eminently the fact with this elaborate work. Napoleon decreed its erection in 1806, after his successful campaigns in Prussia and Germany.

The plan of the triumphal arch was furnished in 1809. The foundations were sunk twenty-five feet below the surface, and it was only above ground in 1811. In 1814, the works were suspended, and remained neglected until 1823. After various interruptions, the pile was finished by Louis Philippe in 1836, thirty years from the decree which gave birth to it, and from the laying of the first stone. The cost was 10,420,000 francs, or over 2,000,000 of dollars. The monument consists of a vast central arch 90 feet in height by 45 in width, over which rises a bold entablature, frieze, and cornice. There is also a transversal arch, 57 feet high and 25 feet wide.

The total height of the structure is 152 feet, and its breadth and depth are 137 and 68 feet respectively. These dimensions are more than realized by actual inspection. The panels, frieze, and pediment of this structure are covered by figures in bold relief, eighteen feet in height; three times the size of life, and those above are half of this size. All of them illustrate the history of France, and they are chiefly warlike. One group may be mentioned as an example. Victory is crowning Napoleon with a laurel wreath; History is writing

the narrative of his deeds, and Fame, soaring above, is proclaiming them with her trumpet.

The observer should ascend the monument, when he will realize more than ever its great height and magnitude, and its massy materials. An aged woman at the door furnished us with a lantern for our ascent through dark passages. The stairs are easy, although narrow, and we mounted, without difficulty, up the 261 steps. The floor which covers the arches, is composed of very large stones, hewn into perfect symmetry. Notwithstanding the mountain weight of this structure, not the slightest crack in the massy stones, or opening in the joints can be perceived, in any part of the pile. The top affords a secure and convenient place for observation, and from this place the observer enjoys a glorious view of Paris and its environs.

Away into the country stretches interminably, as far as the eye can discern, a beautiful road, almost of the same ample width as that of the broad avenue, at the head of which the triumphal arch stands. Looking from the arch to the north, the avenue leads through and along the Elysian Fields, the Place de la Concorde, the gardens and Palace of the Tuileries, the Carrousel and Palace of the Louvre, all of which are in one continuous line of two or three miles. On our right, still looking north, is the dome of the Invalides, the extensive Champs de Mars, the Ecole Militaire near that field, the triumphal arch of Napoleon in the Carrousel, the Cathedral of Notre Dame, and the commemorative column of July 1830, erected on the site of the ancient Bastille.

The immense city, with its encircling walls, spreads all around. Montmatre is an apparent continuation of Paris, the streets not being interrupted as far as can be seen; here and there rise the forts for the protection of the city, and the Seine, winding along through the mazy crowd of buildings, appears and disappears alternately in the picture. On the summit of the Triumphal Arch we found a veteran soldier once in the armies of Napoleon. He wore a blue half uniform, and

a three-cornered cocked hat. He was a man of a noble appearance, tall, erect, and venerable, with threescore years and ten. He showed us wounds, which proved that he had been exposed to the storms of war. He stated that he was a prisoner seven years in England, where he learned the English language, which he spoke intelligibly, and in a mild and respectful manner. He enlisted in the English service, fought in the Peninsula and at Waterloo, where a French bullet passed obliquely through his breast.

Alas ! how much blood has this arch of triumph cost. The places of ninety-six victories are given on the monument, with the names of the generals by whom they were won, the latter making an aggregate of 384.

TRIUMPHAL ARCH IN THE CARROUSEL.—This arch is much smaller than the one just named. It was erected by Napoleon in 1806. It is forty-five feet long, sixty high, and twenty feet broad, and was designed after the arch of Septimius Severus at Rome. I have already mentioned that it sustains a triumphal car and four bronze horses, the originals of which were brought from Venice. These horses are copies of the famous Corinthian ones, plundered from St. Marks, and restored in 1814, when the allied armies were in Paris, and the stolen treasures of many cities were reclaimed.

An American friend, now here, informs me that an English officer was directed to employ his men in taking down the Venetian horses from their position on the arch, and that during the progress of the work, the Parisian populace showed their displeasure by hisses and other manifestations of resentment.

The Place de Carrousel was so called in consequence of a tournament held here by Louis XIV., in 1662. The Carrousel is a large square, which would form a continuation of that of the Tuileries, did not a high fence intervene. This was erected by Napoleon, and in the square between that of the Carrousel and the palace the Emperor was accustomed to review his troops.

The public places in Paris are generally paved, as are the

streets also, with rectangular stones, skilfully placed. Those parts of the squares that are not paved are left with a surface of earth, or gravel, without grass. We could not expect much verdure so early in the season, and there is not now a blade of grass to be seen in either of the great squares of this city; were they not shaded by trees, they would in general have the same desolate and dreary appearance as the Champ de Mars, that great area of trampling men and horses, and rolling wheels of artillery.

COLUMN OF JULY, 1830.—Those memorable days that drove Charles X. from his throne, and transferred his ministers to prisons, are still fresh in the public recollection; the Anglo-American nation felt the more interest in these events, because Charles X., brother to Louis XVI., then Count d'Artois, their friend and ally, was one of the French officers who accompanied General Rochambeau to the United States, and gave them the most essential aid in achieving their independence. The Count d'Artois had the misfortune to become king of France; and he and his ministers, by attempting to muzzle the press, brought on the revolt that drove him into exile, and consigned them to prison and condemnation. The column of July 1st was erected in commemoration of the events of that period.

The monument is inscribed to the glory of those citizens of France, who took up arms and fought in defence of public liberty on the memorable 28th, 29th and 30th of July, 1830. This is a truly magnificent column, and it impressed us most powerfully as we drove down the slope of Père la Chaise, from which site it is in full view. Our impressions received additional strength when we realized that the column stands on the very site of the Bastille, which was taken by the people, July 14, 1789, and afterwards rased to its foundation, so that not a vestige of it remains. The great key of this ancient and terrific prison-house was sent by General La Fayette to General Washington at Mount Vernon, and still hangs in the hall of that venerable mansion.

The column of July, 1830, is of the composite order; its height is 168 feet; diameter, 12; weight of metal, 163,283 pounds; cost, 1,200,000 francs. The Corinthian capital is 16½ feet wide. On this reposes a gilt globe, sustaining a colossal figure of liberty, standing literally on tiptoe, that is, on one arched foot, and with expanded wings; it appears to be about to take its flight, while it bears in the right hand a torch and in the left a chain. On this column are inscribed the names of the 504 patriots who fell during the three days of fighting in July, 1830. In July, 1840, after a solemn act of inauguration, the remains of these victims were interred in the vaults beneath the monument, and those that fell in 1848 have since been added. The sepulchral vaults are secured by iron doors, and contain a vast sarcophagus, as a receptacle for the bones; it is 42 feet long, 3 feet wide and 3 deep. The column being situated in the midst of a large open area, and as there are no lofty houses or other intervening objects in the vicinity, it makes an appearance still more noble than that of Napoleon in the Place Vendôme. All the associations connected with this vicinity, whether relating to more ancient or more modern events, are painfully interesting. Not far distant, was the famous or rather infamous Temple, the prison in which that mild and amiable monarch Louis XVI. was confined, with his queen and family, and from which both were led forth to execution. Sir Sidney Smith, Gen. Moreau, Touissaint Louverture and Pichegru were also confined here, and Pichegru never left the prison. Touissaint was disposed of in a different prison, and both he and Pichegru met their death *mysteriously*.

The prison of the Temple is now destroyed, and only some buildings that were connected with it remain. Near the Place de la Bastille, at the entrance of the Faubourg St. Antoine, was the strongest barricade of the insurgents in June, 1848, and it required the most energetic cannonade to overcome it. The houses in that vicinity were riddled by cannon balls, and some of them were destroyed.

A friend of mine, who was here in 1849, the summer after the contest, found the streets and houses still bearing the marks of severe fighting, but these wounds and scars are now in a great measure obliterated.

It was at this barricade, that the Archbishop of Paris, Monseigneur Denis Affre, met his death, while exerting himself to assuage the sanguinary spirit of the insurgents. He was shot, and his splendid palace rifled of its furniture and works of art.

The Faubourg St. Antoine has been so famous in all Parisian insurrections, that I was curious to see it and its people. The appearance of this Faubourg is decent as regards the houses, and the general aspect of the people does not differ materially from that of the lower population in other parts of the city.

MEDICAL COLLEGE.—According to the usual liberality of French institutions, the Medical College is free to all; both medical students and all unprofessional persons, whether strangers or not. Prof. Henri Wurtz was already engaged in his introductory lecture upon Organic Chemistry, when we entered. His manner is animated and energetic; he spoke fluently, with much gesture, and entirely without notes; walking almost incessantly to and fro before his lecture table, a range of five or six yards. He is a young man, but has already attained high distinction in his profession, as is proved by his being appointed to two professorships in different institutions; a distinction, which, in the case of so young a man, is said to be unprecedented. The students, who appeared to number six or seven hundred, sat generally covered. Almost all were engaged in taking notes, and perfect decorum prevailed. When the Professor ended they gave him a volley of applause.

An American student, who was present, told us that the manners of the students were not always as good as we had now seen them; that if they were not pleased with the lecture or the lecturer, they became disorderly; and that he

had known a tumult got up on such an occasion, when the military were called in to clear the room. This aid is ever at hand, for an armed gendarmerie and an armed civil police are always in the streets, and soldiers stand sentinels at the doors of all public places.

This lecture-room is a perfect semicircle; the seats are plain boards; they are narrow, and without rails or backs, and are arranged so closely together that knees of one and loins of another are very incommodiously in contact.

The room is plain, except some decorations in the dome and cornices, and some smoked and dingy busts. It has indeed a rusty and neglected appearance, and is altogether uninviting, as is wont to be the fact with medical lecture-rooms elsewhere.

MEDICAL MUSEUMS.—There are two museums connected with this institution. One was founded by the celebrated Dupuytren, at an expense of forty thousand dollars, and is called the Musée Dupuytren, in honor of its illustrious founder. It is on the opposite side of the street from the college. It is devoted to morbid anatomy, and embraces a wide range of diseases, illustrated both by preparations and models. The other museum is in the college building, and exhibits human and comparative anatomy, and physiology. Suffice it to say, that both museums are of the highest order; very extensive and various, the preparations excellent, and for the most part, in perfect preservation. They are systematically arranged, fully and intelligibly labelled, and they present to the student every aid, whether in medicine, surgery, physiology, pathology, or comparative anatomy, and general science. They do honor to Paris, and are worthy of all imitation.

Palace of St. Cloud.

April 1st, 1851.

This morning was bright and cheering, and almost the only brilliant day since we left New-York. While we were in England, it rained almost every day; here the weather has been cheerless and cold, and we have required fire constantly. The only fuel is dry wood, and that is not used freely as with us, as it is very expensive.

The ride of this morning was made cheerful by the beautiful weather. Our little excursion of six miles took us out of Paris through one of those fine avenues which lead into the French capital. We passed through the extensive Bois de Boulogne, a forest scene extending several miles to the large village of the same name, containing 7000 people. Next we arrived at the Seine, where that river takes a graceful curve; and, in the course of several miles, is crossed by numerous bridges of stone, elegantly arched, and of the most solid construction. The landscape is here very rich and picturesque. Barracks of superior construction and other handsome buildings, rise on the slope of a hill from the river, and the palace crowns the summit. The palace of St. Cloud was founded in 1572 by a rich financier. In 1658, it was purchased by Louis XIV. for his brother, the Duke of Orleans, who adorned it expensively. In 1782, Louis XVI. bought it for his queen, Marie Antoinette. It was a favorite place with her, as it was subsequently with Napoleon and Josephine. The principal front is 140 feet long and 70 feet high. Important events have happened here.

In this palace Henry III. was assassinated by Jacques Clement, in 1589, and our guide assured us, that a place in the long room—which he indicated—was the very spot where the deed was done.

Henrietta, the queen of Charles I. of England, died here

Here Napoleon, November 10th, 1799, completed the subjugation of the then existing government, dispersed the members of the Council of Ancients, whom he had adjourned to this place from Paris, and assumed the reins himself.

In this place, the capitulation of Paris was signed in 1815. Here Charles X., in 1830, was informed of the explosion of the revolution ; and here Louis Philippe rested a short time, during his flight from Paris in 1848.

We have seen nothing in Europe so delightful as this palace. Its situation is splendid ; being elevated high upon the side of a hill rising from the Seine, it overlooks Paris, and all the populous and most beautiful country around ; the Seine winds gracefully along through the meadows, and appears wider than at Paris, where it is narrowed by the quays and other structures of the city. The views into the park are very fine on all sides of the palace ; in the interior the ground rises, and vistas open up the green slope, with a long avenue of statues standing in the open air in one direction, and a tower in the distance in another, while a noble park of old and lofty forest trees, stretches over the flat ground in front, quite to the river. In the interior of the palace, every thing is in the best taste. The furniture of the rooms remains as it was left by Josephine, Maria Louisa, and the family of Louis Philippe.

The Duchess of Orleans, daughter-in-law of the late king, passed much time here with her children, and their beds, as well as that of Louis Philippe and his queen, remain undisturbed, with their rich silk curtains and covers.

The pictures at St. Cloud are very numerous, and are lovely exhibitions of that almost creative art. They are all drawn from quiet scenes, such as must ever remain grateful to the human mind. Among the hundreds of pictures by the first masters that adorn these walls, there is not a single battle-piece. In this respect, St. Cloud presents a striking and very agreeable contrast with the carnage that crimsones the long galleries of Versailles. Louis Philippe sought, in that palace, to gratify the national avidity for glory, by multiplying battle-

scenes in which the arms of France had been triumphant, and by depicting the persons of her heroes, until the tired eye that gazes on them is satiated with gorgeous costume, and the mind afflicted with human suffering.

At St. Cloud a more amiable feeling was cherished, as appears by the charming pictures of rural scenery, of mild and splendid landscapes, of peaceful buildings, abodes of happy domestic life, scenes living and real, and ever grateful.

As the private rooms in which the successive royal families lived, are rich in elegant simplicity, in a style of chaste beauty, they are in strong contrast with the rooms of state, which are extremely magnificent, and adorned by a profusion of princely decorations. Their domes are all alive with the imaginary beings of fabulous antiquity. Gods and goddesses, and muses and nymphs, and a multitude of creations of poetic fancy and records of old legends decorate the ceilings.

A principal ornament of the public rooms is the Gobelin tapestry, manufactured and hung by order of Louis Philippe. All that I had seen before at Windsor Castle in 1805, or recently at Blenheim Palace, fades in comparison with the rich decorations of the Gobelin looms, which adorn the public halls of St. Cloud.

These textile pictures are perfectly beautiful, and from their magnitude and the august personages of the historical dramas which they present so impressively to the eye, they are sublime. No one viewing them from the distance across the room, would even suspect that they are any thing else than the most perfect productions of the pencil, and even when the observer approaches them, it is not easy to convince himself that the splendid illusion is produced by the interweaving of colored woollen and silken threads.

Five of the scenes here depicted in Gobelin tapestry are copied from original paintings still existing in the Louvre, executed by Rubens, for Maria de Medicis. The first is the Duke of Anjou, declared king of Spain (Philip V). The second of these pictures, which is not less than twenty-five feet square, is

the birth of Marie de Médicis; the third is the presentation of her picture to Henry V.; the fourth, his marriage with her; the fifth represents his departure from his capital, and the committing of the government to the care of the queen. We saw also most magnificent vases of Sèvres porcelain; one of them was presented to Marie Antoinette; it must have been, I believe, five feet high without the pedestal, and of the capacity of a barrel or two.

We have nothing in America that can convey a full impression of these superb productions of the plastic art. They are modelled after the forms of the most beautiful Etruscan vases; the most perfect purity of the porcelain material is contrasted with the finest efforts of the pencil, in the pictures, which being incorporated by the fire, are indissolubly wedded to the basis on which they are delineated, and they are resplendent with gold and blue enamel of cobalt. One is at a loss which most to admire, the productions of the Gobelin looms or those of the Sèvres furnaces.

The floors of the palace, according to the general custom in French houses, are made of pieces of boards. They rarely exceed six inches in width, and are tastefully disposed in various geometrical figures. All the floors that we have seen in Paris, except some that are covered by carpets, are kept waxed; the waxing is renewed daily, and they are so smooth as to appear hazardous to those unaccustomed to walk upon them.

The floors of the palace of St. Cloud have been, heretofore, covered by Gobelin carpets, which are now rolled and put away for safe keeping. We saw the council table of Napoleon and Louis Philippe, memorable for the deliberations which have been held over its boards. St. Cloud was the favorite place of consultation on matters of peace and war; here Napoleon planned some of his campaigns; here Louis Philippe passed much time with his family, and his daughter-in-law, the Duchess of Orleans found a quiet retreat with her little son, the Count de Paris, whom she in person presented in the Legislative Hall during the revolution of 1848. Her husband, the

Duke of Orleans, presumptive heir to the throne, having been killed by a mysterious Providence, she naturally hoped that the legislature would acknowledge the claims of her son, founded on both those of his father and his grandfather Louis Philippe; but all the world knows that she was disappointed, and was fain to retreat and seek protection for her child and herself.

There was a deep feeling of pensiveness connected with our visit to St. Cloud; closed now as it is and quite solitary, without a single individual remaining of those who formerly figured there; it was to us an instructive memento of the vanity of human glory. The splendid apartments remain, with all their furniture and decorations in perfect order. The solitary chapel—chastely elegant, although grave in its architecture, seemed all ready and waiting for the arrival of worshippers; and the entire palace, with its beautiful grounds, impresses one almost with the belief, that kings and queens, and courtiers and nobles, and guests of renown will soon return and give life and joy to those vacant scenes; but alas, except some few members of the family of Louis Philippe and of Napoleon, all are gone to the tomb. The dreaded conqueror of nations found his second prison and his grave on a bleak rock, in the ocean, and his final tomb among those invalids whom, in their youth, he led to fields of battle and victory.

Josephine, once an ornament of St. Cloud, as she was of every scene in which she presided, went with a broken heart from Malmaison to her grave.

An old man, our guide through the palace, said to us, "I have been thirty years here, and I have seen three monarchs expelled from this palace and from their thrones."

I have omitted to mention the large library of Louis Philippe, which still remains at St. Cloud, undisturbed and in perfect order. It is my impression that the number of volumes was stated at 12,000.

MANUFACTORY OF PORCELAIN. — With this celebrated manufactory at Sèvres, two leagues from Paris, on the road to

Versailles, I had long been acquainted, by correspondence and communications with M. Alexandre Brongniart, its late respected director, who held that office 47 years. Long ago, at the suggestion of an American friend, then residing in Paris, he sent me a very interesting and instructive series of specimens, from this manufactory.

We had the pleasure to-day of seeing all the most important processes as carried out on a large scale, and producing the most perfect results.

We were courteously and intelligently conducted, during five or six hours, through every part of the establishment, and saw the most superb and beautiful productions of the art. A museum was formed by the late M. Alexandre Brongniart, of the pottery of all nations and ages, illustrating what he called the ceramic art. He did not overlook America, and it was a pleasure to me to send him, at his request, specimens of our porcelain of Philadelphia, which, in material, compared well with the porcelain of Sèvres, but it was not equal in the ornamental part. The Philadelphia porcelain has an honorable position in the museum, and the rude productions of the aborigines, and especially of the South Americans, were not forgotten.

This museum comprises 9068 articles, which form a complete collection of foreign china, and the materials used in its fabrication; a collection of the china, earthenware and pottery of France, and the earths of which they are composed; with a collection of models of all the ornamental vases, services, figures, statues, etc., that have been made in the manufactory since its first establishment.

Louis XVI. enriched this museum by a fine collection of Greek vases. The models and specimens, which comprehend every kind of earthenware, from the coarsest pottery to the finest porcelain, afford a complete illustration of the history of the art, and are arranged in cases in chronological order, beginning with Grecian and Roman and ending with the most complete productions of the manufactory. The hard porcelain

of Sèvres is formed of the kaolin (porcelain clay) of Limoges, alkali, sand and saltpetre.

In the ornamental part, painters of the highest talent and skill are employed, and the number of artists before the agitations of 1848 exceeded 180.

The ancient art of painting on glass has been revived successfully, and Mr. Ebelman has raised the manufacture of artificial gems to a science. The specimens which we saw, in imitation of all the principal gems, cannot be distinguished by the eye from the originals. By description alone it is impossible to impart any adequate conception of the splendid productions of this manufactory.

Nothing that I have seen in the ornamental arts, unless it be the Gobelin tapestry, has impressed me so powerfully as to the combined effect of the inventive faculties of the human mind, and the magic skill of the human hand. I was not, before this visit, aware that the most splendid and beautiful pictures are painted upon plates of porcelain, and that when framed and hung they cannot be distinguished from the originals from which they were copied. Indeed they are perfectly identical, only, if possible, those on porcelain are the most beautiful. The most skilful artists are employed to paint them on the porcelain plates, and when the heat unites the softened metallic colors for ever to the porcelain, their fusion is so perfect into the substance of the plate that the transition shades are exquisitely blended, and we have a picture, with all the delicacy of the original, to which is added the splendor of the porcelain itself.

The artist is assured also, that (fracture excepted, and against this it is easy to guard) his work is immortal, and will remain unchanged, when time and accident shall have destroyed every canvas and every fresco now in existence. The materials being those of the primitive mountains, will be as enduring as they, and man, by his talent and skill, sheds additional lustre upon the most ancient and most enduring works of his Creator. The cost of some of these wonderful productions of

art is immense, and none but monarchs and princes, and merchant princes, can afford to purchase them. One vase at Sèvres cost 100,000 francs. Some of the smaller pictures cost 26,000 francs, and the larger more in proportion. A dining set of the finest porcelain of Sèvres costs 56,000 francs, and we saw two vases at 70,000 each. The manufacture of Sèvres is a government establishment, and is far from paying its own expenses. Experiments are there made upon the improvement of the art, and the results are liberally communicated for the benefit of other manufactories.

We have in the United States the most perfect materials. Nothing can exceed the feldspar of Chester county, Pennsylvania, from which the beautiful Philadelphia porcelain was made, and which, when placed side by side with that of Sèvres, could not be distinguished from it. Lately, also, we have profited by the introduction of artists, who reproduce in a beautiful manner in New-York the most elegant designs upon white porcelain imported for the purpose.

CHAPEL FERDINAND.—On our return from Sèvres to Paris, we came by another road from that on which we went out, our object being to see the chapel erected by the paternal affection of Louis Philippe to the memory of his son, and expected successor, the late Duke of Orleans.

All the world knows the deplorable accident that deprived the family of their most cherished member, and disappointed all their hopes regarding his future elevation. This sad event happened on the 13th of July, 1842. The duke left Paris in the forenoon in a light open carriage, with a postilion, intending to take leave of the royal family at their favorite rural retreat, Neuilly, and then proceed to the camp at St. Omer. Near the port of St. Maillot, the horses took fright and ran—the coachman not being able to restrain them—when the duke, in attempting to leap from the carriage, became entangled in his cloak, and was thrown forcibly upon the back of his head, which was fractured by the curb-stone upon which he fell. He never afterward spoke, or appeared to have any knowledge of

what had happened. He was conveyed into the nearest house, that of M. Lecordier, a grocer. The accident occurred at ten minutes before twelve, at noon; he expired at ten minutes past four P.M., and without apparent suffering. The royal family, except the Queen of the Belgians and the Prince de Joinville, who was at Naples, all arrived before his death. Two mute clocks in an adjoining building indicate the events—the one with a black face and a white index points to ten minutes before twelve, and the other, of the same appearance, to ten minutes past four o'clock—silent heralds of the painful story. As the horses were, in the event, controlled, and the carriage was not injured, it is lamentable to reflect that the duke would have been safe had he kept his place.

The king, having purchased the house in which his son died, and also the adjoining house and grounds, caused a chapel to be erected on the spot. It was consecrated July 11th of the next year, in the presence of the royal family. The archbishop, who performed the rites, was the same who was murdered by the mob in the insurrection of June, 1848. The chapel is 50 feet long by 30 in height, and is constructed of the light-colored sandstone, which is the principal building material of Paris. In form the chapel resembles an ancient mausoleum, and is surmounted by a cross. The interior is fitted up in the usual style, and with the usual appendages of Catholic churches.

The most interesting things are, on the right, in a recess in the chapel, a recumbent statue, at full length, of the dying prince; and the effect of the figure is singularly impressive. His fallen features and limbs, yielding to the collapse of death; his hand, seeming to press the marble bed on which he lies, while behind his head an angel, in female form, on her knees supports his pillow, and with expanded wings, and hands clasped as in prayer, is ready to lead upward the soul about to be released from the expiring body. It is a very touching incident, that this angel form was previously sculptured as a work of art, by Marie, the sister of the prince, who possessed high talent in that line; but little did she think that she was mould-

ing the guardian angel of her unfortunate brother. In the rear of the building, and behind the pulpit, is the very room in which the prince died. It is now the sacristy of the chapel. Low oaken presses, a confessional of the humblest construction, a chair, a prayer-desk covered with cloth, and an ivory crucifix, form its only furniture. A very affecting picture of the death scene, painted by order of the king, completes the painful commemoration. The duke, a handsome and graceful young man, lies, the size of life, upon his death-bed; his head is supported by the physicians, while the priest is leaning over him; the queen is kneeling by his bed-side; his sister, the Princess Clementina, in the agony of grief, covers her face with both her hands; the brothers, the Dukes d'Aumale and Montpensier, stand next, and in front is the noble form of the father, bowing, as he kneels and fixes his eyes on his dying son, with an expression of deep sorrow, dignified by firmness. All these form a group of the most touching interest, while several eminent men, of the king's confidential friends—Marshals Soult and Girard, the minister, Guizot, and others, participate in the sorrow of the family, and in the bereavement of the nation.

In an adjoining house are several apartments to which the mourning family were wont to resort; and among the articles of furniture there is an elegant cushion, wrought by the queen's own hands. The ground which lies between the chapel and the house is of semicircular form; it is inclosed by a wall, and encircled by beautiful cypresses in a flourishing condition, thickly planted, and forming a verdant barrier. In the centre is a cedar of Lebanon, brought from the mountain by the late Duke of Orleans himself, and planted by the hand of the Count of Paris, son of the deceased prince. The whole scene is very honorable to the paternal feelings of Louis Philippe, whose private character, pure, and unsullied by vice or domestic folly, stands in beautiful contrast with that of Louis XIV. and XV. The former commemorated his profligate life by building a palace for his mistress, Madame Maintenon, and the latter did

the same for Madame Pompadour. The hand of affliction has indeed fallen heavily upon Louis Philippe and his family, whose history presents memorable instances of vicissitudes both of misfortune and prosperity, rarely surpassed in the annals of those who have had the misfortune to be born to an inheritance of that worldly greatness, which is so nearly allied to sorrow, that well may most of us be thankful that a merciful Providence has assigned us an humbler lot.

MANUFACTURE OF THE GOBELIN TAPESTRY.—This manufacture was begun about 400 years ago, by Jean Gobelin, in the dyeing of wool; his successors, of the name of Canaye, worked tapestry for hangings, a manufacture then confined to Flanders. In 1662, under Louis XIV., the establishment was purchased for the crown, and the carpet manufactory was made royal property by Marie de Médicis in 1604.

With one of the young gentlemen of our party, we found our way to the establishment, and by showing our passports, we were admitted, with a great crowd, however, who had come on the same errand. We passed through a long series of rooms. The first contained rich specimens of modern manufacture, but in no respect superior to those which we had already seen at St. Cloud; then followed many hangings of tapestry of the seventeenth and eighteenth centuries, much faded by time. Next were the work rooms for tapestry and carpets, six in number, and containing twenty-five looms.

In the tapestry work, which is called *tissue*, the workman stands at the back of the canvas on which he is employed; the original is behind him, and to this he constantly refers in working out his copy. All cuttings and fastenings are confined to the back of the pattern, as the finished surface must be kept smooth. The thread is vertical, and is called *haut lisse*. The carpet work is called *velours*. In working this the artist stands in front, with the model placed a little above his head slanting upward, at a suitable distance from his eye, which frequently glances from the model to the work, and he cuts the loops off the thread, as in producing the pile of velvet. Some

of the carpets take five to ten years, and cost from 60,000 to 150,000 francs, but none are sold. A carpet made for the Louvre consists of seventy-two pieces, and is over 1300 feet long, or a quarter of a mile. About 120 workmen are employed in the establishment. The productions of these looms are destined only for palaces. Although it is very gratifying to have seen these processes, they are not altogether intelligible, even when we stand by and see the wonderful result. We observe the artist managing innumerable spools of colored silks and yarns, and perceive that there is a great resemblance to carpet weaving, as we have seen it elsewhere; but when we observe, for example, a beautiful human form, partly developed, a limb, or a face, or a hand, and see it appearing as if a part of it had been cut away, we then look at the pattern which hangs near by, and there we see the remainder of the figure, which is, in its turn, to be transferred to the magical web; and so it is the same with a flower, an animal, or whatever else is to be copied.

The embroidery in worsteds, so well understood by my fair countrywomen, resembles, on a small scale, the Gobelin tapestry, both in the stretching of the web, the management of the colors, and nature of the patterns.

CHEMICAL LECTURE AT THE GARDEN OF PLANTS. *April* 12, 1852.—We heard Prof. Fremy at 9 o'clock this morning in the Chemical amphitheatre. He is esteemed a fine lecturer. Like Prof. Wurtz, he is animated, and uses much more gesture than seems, to our cooler temperament, quite appropriate to a scientific subject. His subject was respiration, and he made a free use of the blackboard. The audience—about 150 in number—was miscellaneous, the lectures, like all others in the national establishments, being gratuitous. There were fifteen females present, and one man was in a blue blouse.

The room was very plain; the benches were narrow, and without backs, and there was no ornament except what seemed inappropriate—green curtains all around the upper side of the

circular room, but so dingy and soiled that it would be better without them.

Prof. Fremy is well known for his numerous chemical researches, and particularly for those upon the metallic acids. As an author, his reputation rests chiefly upon the system of Chemistry of which he is joint author with the estimable Pelouze. In person he is stout, with an animated countenance, active movement, and easy pleasant address, well sustained by an agreeable voice and natural elocution. He speaks rapidly, but with remarkable distinctness. The experiments were few, and very clumsily performed by an assistant, who did no credit to his craft. We were also struck by the incompleteness of the material arrangements about the lecture table—so unlike the elegance demanded by a national establishment.

THE MINT.—By favor of M. Pelouze, the head of this establishment, we were permitted to see the mint.

The building is of stone, 360 feet long and 78 high. It was finished in 1775, and stands on the eastern bank of the Seine, opposite to the Louvre. I need not enter into the details of the mechanical operations and chemical processes which we saw. I can, however, add with truth that those at our own mint at Philadelphia, appear in no respect inferior, in scientific accuracy, while in neatness and elegance of mechanical execution, the American mint is decidedly superior to the French. Some processes are here performed by hand, which with us, are more efficiently accomplished by machinery.

In the museum there is a large collection of coins and medals of many countries and ages; they are well arranged for study, and are very interesting and instructive.

The monetary collection of France begins with Childebert I., 511 to 568, and is nearly complete to the present day. The ten louis pieces of Louis XIII. are large and beautiful. Those of Louis XIV. are magnificent, and show the features of the king from childhood to death. The earliest English coin is a half noble of Henry VI.—date 1421. The earliest Spanish

coin is of the year 680. Mexican money being merely the metal in masses, is stamped to indicate the value; Turkish money of 1730-34, $\frac{996}{1000}$ being pure gold; a coin of Charlemagne; one of Charles VII. of 1461—the original die is in existence, and is the earliest known: coins of Louis XII., Henry VIII., Francis I., Ignatius Loyola, Mary Queen of Scots, Cardinal Richelieu, a superb medal by Varin, for which his life was spared, a complete series of Louis XV. and XVI.—the first republic and the empire down to the present time. We saw also numerous medals, and nearly all the dies and medals struck during the consulate and the empire. Our attention was arrested by a bronze copy of the plaster cast taken from the face of Napoleon, twenty hours after his death; and also by a bronze model of the pillar in the Place Vendôme, with the figure of Napoleon in imperial robes, as it was at first designed and carried out.

This establishment is freely shown, on certain days, although it contains immense treasures of uncomputed value, both intrinsically and historically. Gold and silver are the chief medium of circulation in France, bank bills being rarely seen. There are bank bills for larger sums, from 50 francs upwards, but we have seen no paper money of small denominations, except the issues of revolutionary times preserved in museums.

GEOLOGICAL COLLECTIONS.—Accompanied by M. De Verneuille, I revisited to-day the Geological museums of the Garden of Plants, including Cuvier's original collection, and also the superb halls of the School of Mines. M. De Verneuille is well known in the United States, where he won the esteem and friendship of all men of science with whom he came in contact in his extended wanderings. His name was previously familiar to all geological readers, as the companion of Sir Roderick Impey Murchison, in his geological survey of the Russian empire, and as the author of the palæontological portion, forming the second volume of the report containing the results of their joint labors in that very important research.

Our attention was particularly engaged in Cuvier's museum

by the bones of the fossil quadrupeds disinterred at the sandstone quarries of Montmatre, and in other parts of the basin of Paris. These were described by Cuvier, under the name of *Paleotheria* (or ancient animals), and on the study of them, Cuvier founded, not only numerous new genera and species of extinct animals, but drew from them most interesting conclusions concerning the era when terrestrial, air-breathing, viviparous, and warm-blooded animals were first introduced upon the earth. I had the pleasure of seeing the original specimens on which this illustrious naturalist based his magnificent generalizations; they were even more satisfactory than I had imagined, and exceedingly instructive and convincing.

Many other fossils also interested me very much, especially the head of an enormous fossil rhinoceros from Siberia, and the long hair and a portion of the skin, of the celebrated Siberian elephant, found frozen in the ice banks of the White River, in Siberia.

The fossil fish of Monte Bolca and other localities are numerous, and their interest is greatly enhanced by the knowledge that they are the very specimens which Cuvier placed at the disposal of Agassiz for description, in 1824, when our illustrious friend was yet but a student in Paris, although his acquirements and genius had already secured the confidence of the first naturalist of our age. They still retain the labels of Agassiz. Here is the famous case of one fish apparently in the act of swallowing another. The appearance is certainly strikingly like the fact, although Mr. Bakewell and others have suggested that the position of these two fishes is only an accident, from their being compressed laterally against each other. It is certainly more dramatic, if not more true, to contemplate a fish, in the moment of perishing, by being buried in a submarine eruption of volcanic and calcareous mud, as so much more intent on his meal than his danger, that he is caught in the very act of bolting his companion.

We inspected, also, with great interest, the human remains from Gaudalupe, which, forty years ago, excited so much at-

tention and discussion, refuting, as was supposed by many, the opinion of geologists, that the remains of man were never found fossil. The thoracic portion and some other bones of a human form* are encased in recent concretionary limestone, deposited by water over part of an ancient burial ground. The deposit is now known to be of very recent origin, and the remains it incloses are fossilized only in the same sense as are baskets of fruit, stuffed birds, and other objects, which are encrusted by tuff in the spray, or waters of certain mineral springs in Italy and Germany.

The fossil cavern bears are so large as fully to justify Cuvier's assertion, that this animal (*Ursus Spelæus*), was as large as an English hunting horse.

THE MUSEUMS OF THE SCHOOL OF MINES (*Rue d'Enfer*), are under the directorship of the distinguished Dufrenoy, so well known from his joint labors with M. Elie de Beaumont, in the geological survey and map of France, not to mention his system of mineralogy, and other important contributions to science. M. Dufrenoy had, on a previous occasion, with a most dignified courtesy, spent several hours in conducting us through the mineralogical portion of these superb collections. Here we met, also, M. de Senarmont, professor of mineralogy in the School of Mines, and to whose custody the mineralogical collections are more particularly intrusted. M. de Senarmont, at the time we saw him, was engaged in a remarkable investigation, on the artificial formation of crystallized and anhydrous minerals, from solution, and we had the satisfaction of inspecting some of these curious results in advance of their publication. My younger companions, who were more particularly interested than myself in this portion of the museum, made subsequently very numerous visits to the mineralogical gallery, which, in the extent and perfection of its series of crystals, and in the beauty and thorough science of its arrangement, is superior to any other which we visited in Europe.

* The cranium of this individual has been lately discovered in a museum in Charleston, S. C.

The geological collection is divided into two great sections, or chapters. The one in vertical cases gives a stratigraphical order of arrangement, while in an extended succession of horizontal cases, the palæontological characters of the various geological epochs is fully displayed. It is difficult to imagine a collection better adapted for study, in all departments of geology and of mineralogy, than that in the School of Mines. The halls in which it is deposited have been recently reconstructed, and combine grandeur of architectural effect with the elegant order of the cases of polished oak and plate glass, and floors of waxed oak, such as are seen only in France, and upon which we look in vain for the slightest dust or blemish of any sort. Custodes are always in attendance, not merely to keep an eye upon visitors, but by ceaseless care to maintain every point of order that the most fastidious taste could suggest. Here we had the pleasure also of meeting M. Elie de Beaumont, and I could not desire to have met him more opportunely. His manners are exceedingly kind, he speaks English fluently, and was prompt in facilitating our progress through the geological collections. Prof. Bayle of the School of Mines was also unwearied in his efforts to explain this portion of the museum, which was arranged, and, to a large extent, formed, under his particular care. Thus escorted, it would be strange if I had not been deeply interested. In particular, had it been possible that my confidence in the accuracy and truthfulness of Cuvier and Brongniart should have been increased, that effect would have been produced by the contemplation of the very treasures which they garnered up, and which afforded materials for their excellent works, especially on the history of life as it is recorded in the tertiary state, in the great basin of Paris.

THE PANTHEON.—We were attracted to this celebrated church—dedicated to the illustrious sons of France—not so much by its historical associations, as to witness an interesting experiment, now in daily progress, by M. Fouchault, having for its object to show the rotation of the earth by the motion of a pendulum. Familiar as is the fact of the earth's rotation to

every school-boy, there has nevertheless been a remarkable absence of experimental demonstration for its proof. It was the object of M. Fouchault to supply this deficiency by certain peculiarities in the motion of a pendulum, which had before escaped particular notice. The dome of the Pantheon is admirably suited for the execution of this experiment on the grandest scale. The pendulum is only a thin wire sustained on a swivel point at the apex of the dome, and suspending from its lower end a brass ball filled with lead to give it momentum. Its vibrations are communicated simply by gravity, the ball being drawn to the outer periphery of a broad ring of wood under the centre of the dome, and then let go. This large circle is graduated. The point at which the first vibration starts is noted by an index, on the under side of the ball, communicating a groove, or score, to the surface of some moist sand evenly spread in its path, upon the opposite sides of the arc of vibration. It is then observed, upon the return of the pendulum to the point of departure, that the second sweep marks the sand a little to the right of the first mark; and so on, with each successive vibration, there is a constant and progressive horizontal movement shown, until in a certain period, somewhat less than that required for one diurnal revolution of the earth, the entire circle is traversed by the pendulum. It is not easy to discuss the principles involved in this simple experiment in a popular manner, but it is now generally conceded that it is truly a demonstration of the earth's rotation upon its axis.*

For the pleasure of witnessing this interesting physical experiment, I was indebted also to the kindness of our attentive friend, M. de Verneuille. After inspecting it, we devoted a few moments to the historical and artistic claims of the great temple in which it was going on.

* For interesting discussions of this subject see the *Am. Jour. Sci.* vol. XII. [2] p. 256 and 398. Also vol. XV. [2] p. 263. M. Fouchault has contrived a very simple and ingenious apparatus by which this experiment may be shown in a class-room or physical

Public Worship.—We attended service, April 14th, at the Oratoire, in the Rue St. Honoré, a Protestant church, well known to Americans. There were probably twelve hundred people, of all classes, who filled the church. It was very cold—the floor was of stone—the chairs were plain wood without paint, and willow bottomed, such as in America are used in kitchens. Some better seats, that had been reserved, were soon filled by a procession of young people, candidates for admission to the communion. The young men, some of whom were lads, did not wear any costume, but the young women, twenty in number, were dressed in white, with white veils. The preacher was a dignified person; he addressed the candidates for the communion with much fervor, and in a very impressive manner, which drew tears from many eyes. The singing was accompanied by an organ, much in the style of New England, and awakened very interesting associations of home.

It was delightful to see the descendants of the Huguenots, now worshipping in peace and security in the very city where, three hundred years ago, they were slaughtered by thousands on St. Bartholomew's eve, and by hundreds of thousands all over the kingdom; and a century and a third afterwards, on the occasion of the revocation of the edict of Nantz, 1685, they were exposed to a renewal of those bloody persecutions which had scarcely ceased, until Napoleon's strong arm levelled all distinctions, and gave free toleration to the Protestants of France, we trust never to be wrested from them again.* In company with a friend I have visited the principal scenes of the massacre of St. Bartholomew's eve. I have been into the old church of St. Germaine, whose ill omened bell, still hanging where it then was, gave the death-knell of thousands, being rung by preconcerted arrangement, to give notice when the work of murder was to begin; and cruelly punctual were

cabinet. It is described under the last of the above references by M. J. Nicklés.

* This was written in April, 1851; what has happened in France since is too well known to need comment. April, 1853.

the thousands of executioners, who stood ready with the weapons of death in their hands, to strike the fatal blows which crimsoned the streets and houses of Paris with the blood of its best inhabitants, and of eminent persons who had been decoyed to Paris on the occasion of a royal festival. My friend aided me in finding out the house where the good Admiral Coligny was murdered; the very room we saw, and the chamber window from which his mutilated, but venerable form, was thrown down to receive wanton insult from those demons in human shape, who revelled in slaughter as in a pastime.

Church of the English Ambassador.—The English in foreign cities generally manifest their regard for religion, and for their national church, by establishing a place of worship. We sought out, and some of us attended, the church of the English embassy in Paris. It is of ample dimensions for its object, but to-day was only partially filled. The service was solemn; the officiating clergymen were of very respectable appearance, and the sermon was worthy of the occasion. The audience, as we judged from their appearance, were English, probably residents, or like ourselves, visitors in the capital. It is very gratifying to Protestants to find, in Catholic countries, churches in whose worship they can participate.

THE MADELEINE.—Of a Sabbath morning I stepped into the splendid church of the Madeleine. It is the most magnificent of the modern Parisian churches—a perfect Grecian temple, 398 feet in length by 138 in breadth. At either end is a flight of 28 steps, extending the entire length of the façade or front. It is surrounded by a magnificent colonnade of Corinthian columns; each column is 49 feet high by $16\frac{1}{2}$ in circumference; 15 are on each side; 14 on the southern portico and 8 on the northern; they are 33 feet apart, and between them are niches containing colossal statues of saints. The colonnade is crowned by a richly sculptured frieze and cornice. The southern pediment contains an immense alto-relievo, 126 feet long by 24 in height, filled with sculptured figures, of which that of Christ is 18 feet in height. This is

the largest piece of sculpture in existence, and was two years in the execution. I had on this occasion but an imperfect view of the magnificent interior of the Madeleine, as it was crowded with people even to the portico. There was a showy ceremonial going on within. The platform in front of the altar was filled with boys and priests in gorgeous robes, and they were passing in incessant motion with burning candles, genuflexions, and many bodily gesticulations. There was an officer of almost colossal stature, a veteran of fifty, dressed in a gold-laced cocked hat, worn crossways, à la Napoleon, an embroidered coat, with an epaulette on one shoulder and crimson trappings on the other, a sword, crimson plush knee breeches, ornamented with gold, white stockings and black shoes. This man, with an air of dignity, paraded up and down the church, apparently to keep order. Holy water was zealously distributed, and chiefly from a brush, which any one who chose, touched. The chantings and music proceeded along with the rest of the ceremonial, but I could make nothing of the worship, and was not reluctant to withdraw to the humble

Wesleyan Chapel, hardly a stone's throw from the Madeleine. Here in a very plain, obscure building, approached by a narrow alley from the street, I found 150 people, decently dressed, and engaged in the simple worship of the Wesleys. A sensible man, of fifty years or more, preached an excellent sermon to an attentive audience; and I felt the service to be far more profitable, because it was more spiritual (at least it so appeared to me), than all the pomp and pageantry of the Madeleine. Both in this chapel and in the church of the English embassy, Queen Victoria and the royal family were prayed for with as little reserve as in England.

CLUB DINNER.—Twenty-five years ago, an accomplished young Parisian gentleman passed six months in New Haven, and I believe a year or more in the United States. He was introduced to my family, and won our esteem and entire confidence; he was also on familiar terms with many of our first

families, and became a general favorite. He carried away with him very gratifying souvenirs of his American residence. Occasional exchange of letters had kept him in mind, and he appeared to retain a strong predilection for American society, and to hold in high estimation our domestic happiness, and that virtue and intelligence on which it is founded. This gentleman we have met on our present visit, and with a kind renewal of our earlier intimacy. I found him to be the same agreeable and interesting man that he was in his youth.

Mr. T. invited me with my son to dine at his club, at six o'clock, P. M.; and being willing to see this mode of French society, we accepted the invitation. The club embraces 500 members, from the higher ranks of society, but does not exclude foreign members. New members are added by election, made after a strict scrutiny. Five hundred francs are paid on admission, and one hundred annually afterwards, beside some smaller contributions.

The Club-house, at a rent of 30,000 francs per annum, is on the Boulevard des Italiens, very near to our hotel. It contains a very elegant suite of rooms of ample dimensions, and richly furnished and decorated. Drawing-rooms, sitting-rooms, rooms for retirement and study, and reading-rooms for periodical works, smoking and billiard or card rooms, dining-rooms, kitchens, &c., &c. A contractor furnishes an elegant and ample dinner every day, and any member of the club may dine there sumptuously, whenever he pleases, and may bring a guest with him.

On this occasion, our friend had borrowed from another member his privilege of introduction, and this provided seats for us two on the same day. There were covers laid for forty persons, which is as many as usually assemble.

We were introduced only to the Commissaire, the active head of the association, and to two or three other gentlemen, one of whom had been in New Orleans.

Mr. T. placed me between himself and an Irish gentleman, who had been many years in Paris; but, by his re-

marks, he fully verified Horace's sentiment: "Cœlum non animum mutant qui trans mare currunt," for he made no secret of his strong national prejudices. When I spoke highly of the magnificent structures and noble institutions of France, he replied that it was all owing to national vanity. I rejoined that national vanity was quite a common trait, but that I thought his country was too proud to be vain; which he allowed to be true.

The dinner was excellent, and served in good taste, with a liberal supply of excellent solid meats, which is more than is always the case at French tables—where many odd little preparations, whose composition is not always understood by the guest, are interspersed along as interludes, among more serious matters; and among many viands the appetite is not satisfied. There were many servants in livery, ready to attend to every want; and at table one servant attended to only three or four guests. Wine was used in great moderation, and the company, after sitting but little more than an hour, rose without ceremony, and quietly retired in perfect sobriety. There was nothing in their appearance to distinguish them from gentlemen in England or America.

Among the company there were noblemen, Russian, Prussian, and French. Many of them were old men with snowy heads. A French nobleman was pointed out to me on the opposite side of the table, who has recently made a journey to visit Henry V., Count de Chambord, son of the assassinated Duke de Berri, and grandson of Charles X. This now exiled prince, who, of course, regards himself as the rightful heir to the crown of France, declared, that he would never return to France, unless without any conditions.

April 16th.—This morning our whole party were guests at a *dejeuner a la fourchette* in the apartments of our attentive bachelor friend M. T., on the Rue des Champs Elysees. The apartments are, of course, elegantly furnished, as the houses of the upper classes of French society always are, embracing numerous objects of art and vertu—Mosaic, polished stones, and above

all, a fine and elegantly-bound library of choice editions of valuable books. I was surprised to find among them French translations of Young's Night Thoughts, and Hervey's Meditations.

We were not a little interested in turning over the pages of our friend's album, kept when he was in Connecticut, twenty-five years before, and rich in varied personal associations, of mutual acquaintances, or departed friends. Here was the name of a belle, now a grave matron of —, since enrolled among the female poets of America; or of some young man, now a gray-haired worker in life's earnest toils.

The breakfast was served about eleven o'clock, and was really an elegant dinner, according to our estimate of a repast; and in the reign of Queen Elizabeth of England it would have been quite in time, as eleven A. M. was the court hour of dining. Excepting the serving of coffee, and the absence of soup, it was in all respects a French dinner, including the wine. For the details of the courses, I must refer to my lady companions.

The most interesting part of the entertainment was derived from the polished hospitality of our host, who retains the brightness of youth in his now mature meridian of life. Elegant celibacy is more common in Europe than in America; but no refinements and embellishments can compensate for the absence of refined and lovely woman.

SCIENTIFIC ARTISTS.—Paris contains many scientific artists for the construction of physical instruments, whose names have a European, and even a cosmopolitan reputation. Such are Pixii Dubosq (Soleil's son-in-law and successor), Deleuil, Oberbauser, Nacet, and others. The magazines of these artists are the constant resort of all men of experimental science. We have had occasion to call upon several of them, and have been struck with their intelligence, courtesy, and skill. MM. Deleuil and Dubosq have each given us and our friends an evening, for the purpose of showing very brilliant and beautiful experiments with the galvanic light. Each of them has constructed an instrument for regulating the constancy and intensity of this light,

By these instruments, the galvanic focus can be maintained for seven hours of a uniform brilliancy—a result unattainable by any former arrangement of apparatus. It is effected by means of an electro-magnet, operating somewhat in the manner of the telegraphic register; the power of the electro-magnet being dependent on the flow of the current through the carbon poles of the instrument. The result is, that any cessation of this flow relaxes the power of the magnet and the force of gravity in a descending lever, then renews the contact between the poles, and with it the light. These movements are so instantaneous, that no visible interruption of the light is perceived. This arrangement enables the optician to substitute the light of the galvanic focus for that of the sun, or of the oxyhydrogen blow-pipe; and to perform, in a most satisfactory manner, all optical experiments demanding a powerful and steady flow of light. The apparatus of both these artists worked to our entire satisfaction. M. Deleuil has succeeded in perfecting the manufacture of carbon cylinders for galvanic batteries; and we gave the preference to his form of Bunsen's battery over all which we saw. The establishment of M. Duboscq has been long celebrated (as founded by his father-in-law, Soleil) for the skill with which the most elaborate and delicate optical apparatus is there constructed. All the physical cabinets of Europe have derived some of their most valued pieces from this establishment. Here we saw for the first time the prismatic spectrum formed in an admirable manner from the decomposition of the galvanic light. The colors appropriate to burning silver and various other metals in the focus of this instrument, were beautifully shown upon a white screen, and a great variety of other experiments in polarization and decomposition of light. A magnificent result was obtained by transmitting the galvanic light from a parabolic mirror through a box containing water, while a parabolic jet spouted from a small orifice opposite to that where the light entered. The effect was the bending of the light out of its rectilinear path by the falling stream of water, which, as it dashed upon the pavement from the height of ten feet or more, seemed converted

into a stream of liquid fire, while only a very feeble beam could be perceived on the opposite wall, in the direct path of the light from the mirror. Every evening we see upon the quays on the Seine one or more of these instruments, throwing its powerful glare of light aslant from some window down the river, illuminating the bridges, and rendering the surrounding gloom more obscure.

We saw much of MM. Nacet, father and son, whose reputation as microscopic artists is second now to none in France. The earnest simplicity of manner, accompanied by respectful confidence, is very striking in the scientific artists of Europe generally. Many of them are men of great learning as well as skill. Soleil is a member of the Academy of France, as Oertling is of that in Berlin. And the savans of Europe do not hesitate to consult them with a freedom of confidence equally creditable to both parties.

The scientific societies of Paris are really efficient bodies, pursuing their objects with ardor, perseverance, and success; membership in them is the reward of merit, and not the result of favor. All communications are revised by able committees, who, after a strict scrutiny, report upon them.

We looked in, for a short time, at one of the evening sittings of the Geographical Society, where we identified a number of men of eminence.

THE FRENCH ACADEMY is the great centre about which the whole world of science, in a certain sense, revolves. I had the honor of being escorted to one of its weekly sittings on Monday afternoon at three, by the venerable Cordier, now I believe the only surviving member of that large corps of savans who accompanied Napoleon to Egypt. His little work on the internal heat of the earth, presenting decisive proof that the temperature increases as we descend, made a great sensation in the scientific world, and however it may at first have appeared to savor of extravagance, his startling conclusions have been fully established. Although M. Cordier has passed fourscore, he is still erect, active, animated, affable, and warm in his address

By him I was introduced to the distinguished geologist, M. Constant Provost, professor of geology in the Sorbonne. M. Provost has been the steady and able opponent of the elevation theory of MM. Elie de Beaumont and Von Buch.* Sitting by his side in the centre of the long hall where the Academy holds its sessions, I had, for a brief space, opportunity to scrutinize the array of leading minds by which I was surrounded. Before me, elevated upon the tribune, and with the baton of his office, sat M. Rayer, the distinguished physician—and president for the year. On his left, was the striking form of the perpetual secretary, the illustrious Arago, his face strongly marked by dark and shaggy eyebrows, and deep lines of thought. There was the amiable and dignified Biot, with his little velvet cap. Bou-sangault, Payen, and Dumas, the chemists—Brongniart, Milne Edwards, Elie de Beaumont, Leverrier, and many others equally well known. Some of these I now saw for the first time, as they were kindly pointed out to me by M. Provost. There were present in the room some 200 persons—including, of course, many not members. The room is adorned by busts and portraits of distinguished members of past times. To reach it, we pass through the library, and there, on going out, I encountered M. Vattemare, so well known in America, from his system of exchanges. He was zealous to serve me, and by him I was escorted to the royal library in the Louvre, containing some 85,000 volumes, and in some respects the most interesting library in France. This library, formerly the property of Louis Philippe, is now opened to the public at certain hours.

The librarian, a man of dignified and polished appearance, showed me a splendid manuscript copy of the Gospels, formerly the property of Charlemagne; it was written out in golden letters upon vellum, expressly for the monarch, and cost the labor of seven years. It is still quite fresh and entire, after the lapse of ten centuries. Its cover was once embossed with silver, which in an age of rapine was torn off, and the manu-

* The death of this distinguished man is announced as these sheets pass through the press.

script thrown aside among rubbish ; but was after a while recovered, and no part was missing. Here, also, I saw the prayer-book of Charlemagne ; it bears the date of 730. This library is arranged in 14 rooms ; the books are in excellent order, and make a very handsome appearance.

The preceding remarks on Paris are to be regarded as illustrations of only a few leading features of this great and splendid city. If they have any value, it is derived from the fact, that a stranger who has only a few days or weeks at his disposal, may find, as we did, every day, interesting and valuable objects with which to fill his hours.*

Regretting that the limits of our time precluded a longer sojourn, at present, in Paris, and hoping for some additional opportunities on our return from the south, we now prepared to commence our journey to Italy and other countries, taking our course by the usual route of Dijon—the Saone and Rhone—Lyons—Marseilles—and Genoa.

Departure from Paris.

April 14, Tuesday.

We left Paris at eleven o'clock, A. M. We had engaged our passages quite through to Lyons, and mounted the diligence a mile from our hotel, in order to ride to the station house on the northeast edge of Paris, and then to travel on the railroad to

* Among the numerous works on Paris, no one probably presents more graphic sketches than the late production of Sir Francis Head, 1851. He picked up here and there the *sticks* of which his *faggot* is composed ("A Faggot of French Sticks"), all over Paris, taking his reader into all sorts of places, and making him familiar with people of every class, and with the places, institutions, and occupations with which they are connected. The off-hand, colloquial, often humorous, and always lively style of the author engages attention, while the precision of his facts communicates valuable instruction, which may be remembered when his broad humor has been forgotten.

Tonnere, without leaving our seats in the diligence. For this purpose, the diligence, with all its passengers and luggage, is driven beneath the roof of a machine, like the old-fashioned hay-scales of New England, and, with its entire loading of people and baggage undisturbed, is lifted off bodily from the wheels, and suspended in mid-air while being transferred to a railway truck.

THE DILIGENCE.—This ponderous carriage has been so often described, that a short notice of it will suffice. It is divided into three distinct apartments. *The coupée* is in front, and is in form almost exactly like the English post-chaise, having one seat, sufficient for three persons, and, as there are glass windows on the sides and in front, and the coachman's seat is so high as not to interfere with a full view of the country, this apartment is very pleasant, and is all that could be desired. Three of our party including myself were here accommodated.

The middle apartment is called the *interieur*, and is exactly of the form of a common coach, with two seats, to accommodate six persons. In this, the remainder of our party, including the courier, were seated.

The third apartment, situated in the rear, is called the *rotonde*; it has two seats, receives six or more passengers at a lower rate of fare, and has a door behind.

Upon the top of the diligence, and behind the coachman, is a seat called the *banquet*, which will receive three persons. There is also a conducteur, who is responsible for the baggage; he gives all needed information, and bestows attention upon the comfort and safety of the passengers. A postilion, an extra man, is always vigilant to leap off when there is occasion, to attend to the horses, if restive, or whip them into more speed, if lazy. Thus the full complement may be twenty persons, or more. All the baggage goes upon the roof; it is usually a huge pile, and is covered by a tarpaulin. The diligence, thus loaded, weighs five or six tons; it is actually weighed. The launching of five of these great machines upon the railroad at Paris, detained us, to-day, nearly an hour; we were, in fact, pas-

sengers both in the diligence and upon the rails, and proceeded very pleasantly, on an excellent road, in the best of carriages, and with a bright sun over our heads. Our speed was 25 miles an hour, and we arrived at Tonnere, 123 miles, in five hours, at 4 o'clock P. M. So rapid a ride, with no opportunity to leave the carriage, must necessarily exclude any particular notices, except those that are historical, and those that relate to the surface of the country.

We passed Montereau, on the left bank of the Seine, where Napoleon fought his last battle, before the capitulation of Paris, Feb. 18, 1814. A cross stands near the road to mark Napoleon's position, his artillery being on both sides of the road. The emperor, in person, took his station amidst the guns, to direct their fire, so anxious was he to annihilate the dense masses of the enemy that were crowding over the bridge. The allies were driven by the French cuirassiers over the bridge, which they had merely time to blow up to prevent the French from following them. A bridge over the Seine marks the place where Jean Sans Puer, Duke of Burgundy, was murdered by order of the dauphin, afterwards Charles VII., during a conference which was intended to produce a reconciliation, that the two parties might combine to resist the invasion of Henry V. of England. To prevent a collision, a double barrier had been erected between them; but it did not avert a fatal blow which was struck by Tanneguy du Chastel. At Sens, a town of rather fewer than 10,000 inhabitants, are the remains of many ancient chateaux, and of the old wall—partly Roman—around the town. There is here also a fine old cathedral; and there are some personal relics of Thomas à Becket, who, in 1164, fled from England, escaping from the anger of Henry II.

At Vallery, twelve miles west of Sens, the Grand Condé is buried, in the church, which contains a costly monument of marble.

We passed through the forest of Fontainebleau, of vast extent, and formerly much frequented by the monarchs of France for the amusement of hunting; and this gave origin to the an-

cient palace, whose towers we could merely discern as we passed rapidly by. Louis VII. built a castle here in 1162, and a populous town grew up under the smiles of the court, and the influence of the *Chateau Royal*. Here Napoleon took leave of the remnant of his faithful Old Guard, April 20, 1814, previous to his abdication. The table upon which he signed this document is covered by glass to prevent mutilation by visitors. Here Pope Pius VII. was confined during three years by Napoleon—a real prisoner, although surrounded by external honors, and sumptuously provided for. Mineralogists are acquainted with the so called Fontainebleau crystals of sandstone, being really calcareous spar of the rhombohedral form, enveloping sand, which gives them the power of scratching glass. Splendid groups of these crystals are in the mineral gallery of Yale College, being a part of the rich cabinet of the late Gigot d'Orcey, who was sacrificed during the bloody reign of terror in Paris.

The country between Paris and Tonnerre is very beautiful: the verdure is intense, and the cultivation is like that of a garden. The farms are divided into small territories among different proprietors. Often the fields and the slopes of the hills exhibit a striped appearance, one portion being in grass, another in vines, and a third covered with brilliant yellow flowers of mustard.

Vines are extensively cultivated; but not having as yet put forth their leaves, the vineyards have an arid appearance. Innumerable bundles of sticks are piled on the fields ready to support the vines as soon as they shall vegetate.

TONNERRE TO DIJON, NINETY MILES.—At Tonnerre we partook of a repast, such as it was, and such as it ought not to have been. Crowds of people rushed to the ill-provided tables in a squalid restaurant. Our party succeeded, after some delay, in obtaining a small private room; but we were willing to leave so comfortless a table as soon as possible.

Near Tonnerre, we saw the chateau formerly the abode of Admiral Coligny. It is still in good preservation, and the ter-

ritory is bounded by high stone walls, and by grand avenues of trees. In another chateau, built by the brother of Coligny, about six miles from Tonnere, secret meetings were held by the Huguenot leaders.

The estate of Tonnere was purchased by Louis XIV., and presented to his minister Luvois, who is interred in this vicinity.

At Tonnere our railroad terminated, and the bodies of the diligences being again placed upon wheels, we resumed our seats in the carriage, drawn by six horses, three being side by side. The country from Paris had been, in general, beautifully level, but now we ascended a long hill; we soon perceived the shadows of evening descending upon us, and as we were to travel all night, we with pleasure hailed the full moon, which seemed like an old friend, and inspired us with cheerfulness as she threw her silver rays into our faces.

Our observation of the country through which we passed, although aided by the lunar light, was, of course, imperfect, but it was very evident that it was not the lovely region through which we had travelled in the daytime. There was a succession of hills of moderate elevation, but not cultivated like the plains which we had left; some parts appeared dreary, and we did not so much regret that we were passing in the night. We had, however, full opportunity to observe the admirable manner in which the diligences are managed. We had generally six horses, and occasionally seven and eight, and always, when there were more than four, three or four were harnessed side by side. With few exceptions, the horses were very large, active, and in fine condition. They were in perfect training, or they could hardly have been managed by one man, and he elevated above the top of the coach. They were rarely driven over an hour, and when we arrived at a new station the relay of horses was always ready and waiting, and three minutes generally sufficed for the exchange. When quite ready in their places, although some horse more spirited than the rest occasionally pawed the ground, and thus showed his

eagerness to go, no horse moved; like drilled soldiers, they stood, waiting the word of command, and the instant the peculiar shrill cry was heard, which the French coachmen always utter at the moment of departure, the powerful team would dart forward with wonderful energy, springing to their work as if they loved it. Not unfrequently the team of eight horses, four abreast, went off in a full gallop, and the heavy diligence bounded after them, as if it had been a common coach. Their speed was fully eight miles in an hour, which is surprising when it is considered that they draw from 1500 to 2000 pounds each, according to the number of horses. The roads are so firm, smooth and wide, that even when there are four horses abreast, they have abundant room. It is amusing and interesting to those in the coupée to see these almost intelligent animals go off at high speed, at the sound of the coachman's voice, or the crack of his whip, nor do they relent until they arrive at the station where they expect to be released. If the horses were not large and powerful animals, and their natural energy undiminished by mutilation, they could never perform their arduous duty. The diligence* is, however, about to disappear on this road, and whoever travels upon it next year, will find that the rails have supplanted the horses, between Tonnere and Dijon. Sleep in brief naps may be enjoyed in the diligence, as we found during the last night, and therefore, arriving at Dijon, 213 miles from Paris, at 5 o'clock, A. M., we were soon in a condition to be active again.

* Rope harness has in a good degree, but not entirely, disappeared from the diligences; we have had ropes for traces, but the position did not, as in more ancient times, mount one of the horses; and the enormous jack boots, rising above the knee, have also disappeared.

Dijon.

April 16, 1851.

As is usual in France, we drove into a court, passing through the house by an arched passage, and found ourselves in a hollow square in the yard of the diligence office, surrounded by high stone walls. The diligence is not so obliging a vehicle as the stage coach in America; it never waits upon the travellers at their houses or hotels, but they are expected to come to the diligence office, transporting their luggage as best they may. In Paris, we had walked a mile or more from our hotel to seek the diligence, and now, like passengers arrived in a ship, we left our craft at her moorings, and, under the guidance of our attentive courier, walked to the Hotel de la Cloche, the best in the city. Here, a similar entrance into a dirty court, gave us no great promise of the comfort which those who had been travelling through the night required; and François brought us the not very agreeable intelligence that the house was full. They, however, showed us into the Salle à Manger (eating room), where there was a little warmth, but not a very agreeable odor from the stale fumes of food. Soon, another room (both were on the ground floor, and opening into the foul court) was provided for washing, although without soap,* which, even in Paris, the traveller is expected to provide for himself. After some delay, the ladies also found an apartment, and our ablutions completed, we were in a condition to enjoy an early breakfast of bread and butter, coffee, eggs and mutton chop, all of which articles are excellent in the north and west of France. Thus refreshed, we were ready for an active day, which was at our disposal in this ancient and interesting city.

* This we found to be the fact all over the Continent; we nowhere found soap on our washstands except at Meurice's, Rue Rivoli, Paris, where many English and Americans resort.

Dijon contains 26,000 inhabitants, and is the old capital of the Duchy of Burgundy, now the chief place of the department de la Côte d'Or. As in all the French provincial towns, the houses are crowded together on narrow streets, in general, without any particular attention to symmetry and neatness; they are universally of stone, the roofs usually of tile, often covered with moss or soiled and rusty with age. Many of the larger towns are adorned by public squares. Dijon, with its grand cathedral, numerous churches, public institutions, and ducal palace, wears an air of sombre dignity and great age, strongly in contrast with the light and airy aspect of our recent, newly painted, and quiet rural towns. There is in Europe no parallel to our villages and smaller towns, where all is new and comparatively temporary.

In the transient views which we are taking of European cities, I must decline the attempt, which is often both tiresome and unsuccessful, to describe, with much detail, churches, cathedrals, palaces, fortresses and castles. A few striking features I may attempt to sketch, and, in general, these are all which the rapid traveller carries away, and all which the succeeding traveller and the reader of his narrative would care to notice.

The churches of Dijon have a castellated appearance, and some of them, like the temple at Jerusalem, are desecrated; for even a Protestant feels the gross incongruity of converting, as we have seen here, one old church into a market for wheat, and another into cavalry barracks, while the ancient chapels and cloisters were filled with hay and straw. While deploring this misuse of things sacred, we could not forget, that, during the American Revolution, the old South Church in Boston, and the Dutch Presbyterian Church in New-York, were despoiled of their pews by the Protestant British, and converted into riding-schools for the cavalry.

Some of the churches in Dijon are, however, in good keeping and high preservation. Notre Dame is a fine Gothic structure; on the clock-tower are two figures, whose hammers strike the hour, as formerly did those of St. Dunstan, in

the Strand in London. The clock was brought in 1382 from Flanders, by the then Duke of Burgundy, Philip le Hardi, who, as is justly remarked, should rather have been called *the cruel*, as he plundered and burned the town, where it was obtained, and massacred the inhabitants. In this church the people were at worship, but we walked quietly around; they were apparently poor people; most of them were on their knees upon the cold stone floor and counting their beads. The great cathedral stands on the site of one more ancient; the present building is very large and grand, and abounds in statues and pictures.

I suppose it was in this building that the celebrated French chemist, Guyton de Morveau, performed an early and then novel experiment. The air of the church having become offensive from the putrefaction of the corpses beneath the pavement, Morveau, at the request of the magistrates, purified the atmosphere, by the decomposition of common salt by sulphuric acid; the vessel being placed on a pan of coals, the church was soon filled with muriatic (hydro-chloric) acid gas; the church was then closed until the next day, when it being opened and ventilated, the miasm had disappeared.

The Cathedral has two grand towers and an arrow-like steeple, very high and acute, springing out of the body of the building. Although it is said to be in general harmony with the rest of the structure, it appeared to me a deformity.

Dijon has an Academy of Science and Belles-Lettres, founded in 1725. This academy has numerous published volumes of transactions, and among its active members is M. Alexis Perrey, well known for his researches on the phenomena of earthquakes. There are also here a school for the Fine Arts, a collection in Natural History, an Astronomical Observatory, and good public Libraries. The manufacture of aromatic mustard is an important branch of industry in Dijon.

PALACE OF THE DUKES OF BURGUNDY.—This ancient castle is in the midst of the city. It is on flat ground, and not elevated, as many similar fortresses were in ancient times.

This structure is still very imposing. It was the palace of the Dukes of Burgundy until after the union of that Duchy to the crown of France, when it became the *Palace des Etats*.

The front on the street is modern, although it is in keeping with the rest of this vast quadrangle, which, as usual, is entered through a portal in the building, leading to a hollow square. This construction rendered the whole castle susceptible of defence. With closed gates and grated windows, and archers on the towers, or musketeers and cannon, since the invention of gunpowder, such fortresses became capable of sustaining a siege. Exposure to attack doubtless induced the wealthy, in centuries past, to construct their houses in a similar manner, in hollow squares, with grated windows, or with no windows in the basement, and with strong gates, as we find them in Paris and elsewhere, even at the present day.

The interior court furnishes also a convenient access to the entire establishment, which, being extended into a complete quadrangle, forms a great circuit, and is capable of affording large accommodation. Carriages are driven into the court, where there is usually sufficient room to turn.

Two sides of the quadrangle of the palace of the Dukes of Burgundy are now occupied as a garrison, by soldiers. In the other two sides of the quadrangle, the rooms are preserved in their ancient splendor, and perhaps they are even more beautiful than they were originally, for they have been restored by Louis Philippe, and now make a fine appearance.

There is an extensive picture gallery, in which many of the pictures are large, and some of them are worthy of notice. The principal attractions of this ducal palace are authentic articles representing the history and arts of the middle ages. We viewed these things with great interest. Among them is a splendid crosier of St. Robert, the first Abbot of the Cistercian order; the richness of the gold is strongly contrasted with the brilliancy of the ruby which it incloses; the size and lustre of the latter, however, countenance the suspicion that it may be factitious. The wooden cup of the good St. Bernard

is also there, as is the toilet of the Duchess of Burgundy, elegantly carved, and furnished with boxes and caskets of ivory.

*The Tombs of PHILIP LE HARDI, 1342, to 1404, and of his son and successor, JEAN SANS PUEUR, 1371, to 1419,** are very venerable structures. They are large and high, and are beautifully wrought in marble, the figures being of full size, and recumbent on the tombs. Philip le Hardi is in his ducal robes. It has been already mentioned that he massacred the people of a village in the Netherlands, and, as if vengeance was not allowed to slumber, his son was basely murdered by his rival, the Duke of Orleans, as before mentioned, at the bridge of Montereau, September 10, 1419; and now the atrocious deed is recalled by the sight of the tomb of the noble victim.

There is a picture in one of the rooms showing his dead body, with a horrid gaping wound in his forehead, through which his skull was cleft by the battle-axe with which he was slain. When Francis I. visited the Chartreuse, the body was shown to him; and, pointing to the gash in the skull, he said, "Through that the English entered France."

A beautiful cloister is wrought in alabaster beneath the tomb of le Hardi, and also beneath that of Jean Sans Puer, in which the monks are represented, with very expressive faces, as mourning on account of the death of their patrons. These miniature groups are very natural, and exhibit every variety of expression for grief, in numerous figures, only a few inches in height.

We were conducted into a large apartment, which was the reception-room of the great Condé.

In that apartment in which are the sepulchral monuments, there are suits of armor, entire and perfect, as they were worn in the heroic age; they are burnished steel, and are accompanied by ancient swords, some of them of enormous length.

The ancient convent of the Chartreuse, near the city, has

* Birth and death.

been converted into a retreat for the insane, and when we were there, a lunatic girl, with true French gayety, was dancing on the green-sward and clapping her hands. Within the same area of ground, there is a fountain called the Well of Moses; it is surrounded by a group of statues of holy men, patriarchs and others, whose countenances are admirably expressive.

Dijon has been the birthplace of many eminent men—Bossuet, Guyton de Morvean, St. Bernard (in the vicinity). The city is surrounded by beautiful public walks, and the old ramparts form elevated terraces.

“A fortified camp, constructed by Cæsar, gave origin to Dijon. Marcus Aurelius caused it to be surrounded by walls.” Encircled by a belt of foliage, its appearance to the approaching traveller is agreeable.

To Chalons.

April 17, 1861.

A fine railroad, through a most beautiful country, and furnished with excellent carriages, bore us in two hours (forty-three miles) to Chalons.

On both sides, as far as the eye could reach, or the bounding mountains of the Côte d'Or on the west would allow us to see, the fields were in the highest state of cultivation; when the track of the road ran high enough to overlook them, they appeared like gardens rather than farms. We were in the very region of the finest wines of Burgundy; and the fields, particularly on the slopes of hills, were occupied chiefly by vines. Many other crops were in preparation—maize, potatoes, &c.; while brilliant yellow blossoms of the mustard plant, covered wide tracts, and formed a striking contrast with the bright verdure.

The vines are planted in trenches, about two feet apart, and are trained to poles thirty to forty inches high. In the best

vineyards, the vines are very old, and when replaced by others, a larger crop, but of inferior quality, is obtained.

We passed Beaune, which contains 10,000 inhabitants, and was the birth-place of the mathematician Monge, the celebrated savant, a personal friend of Napoleon, and who was one of his Egyptian corps.

In travelling more than 400 miles through the rural districts of France, we have seen only a quiet, industrious population, peaceable in their habits, and, as far as we have had intercourse with them, courteous and kind in their manners. We have seen no rudeness, no broil or tumult—have observed no one who was not decently clad, or who appeared to be ill fed. We are told, however, that the French peasantry live upon very small supplies of food, and in their houses are satisfied with very humble accommodations. Except in Paris, we have seen no instance of apparent suffering, and few cases even there; nor have we seen a single individual intoxicated or without shoes and stockings.

CHALONS.—We were safely quartered before night in this town of 12,000 inhabitants. Our rooms looked out directly upon the Saone, whose rapid stream, active with small steam-boats and other water craft, and a rich and beautiful country on the other side, formed a pleasing picture. There is a fine promenade along the river, whose bank is defended by a massy wall of hewn stone, connected by iron bands, and a series of steps, also of hewn stone, descend to the water. This is only one example of that solidity and thoroughness of construction which we every where observe in the public works of this country. Every thing appears to be done for perpetuity, and nothing for fugitive and transient effect.

We visited a large cathedral, in which there was a numerous assembly, gathered by the passion week. In another church, on the opposite side of the river, we found a hospital of sick soldiers—certainly a much better use than the abuse of temples of worship which we witnessed at Dijon.

From this place, which is the head of steam navigation,

there is much activity of business flowing in from the interior of France, and down the river. Chalons is said to be the ancient Cabillonum of the Romans. We were unable to visit a fine granite column, which is attributed to that people. Having travelled through the preceding night, we were grateful for the repose which this quiet town afforded; and being quite willing to exchange the land for the water, we engaged our passage in the steamer *Hirondelle*, a river boat, to proceed to-morrow, at eight o'clock.

Chalons to Lyons.

April 16.

On a bright and beautiful morning, our river steamer, long and narrow, favored by the current, and filled with passengers and freight, darted rapidly forward, and made her passage of 100 miles in somewhat less than seven hours. The scenery was mild and delicately beautiful; but it was neither picturesque nor grand until we approached Lyons. I availed myself of the leisure on board to peruse a history of Louis Napoleon's imprisonment, and of his escape from the prison of Ham, including also a sketch of his invasion of France. Strange vicissitudes of events! The prisoner of Ham, who, after a confinement of five years and nine months, made his escape, almost by a miracle, was, at last, by a voluntary movement on the part of the French people, elevated to the supreme dominion of this vast empire. An anxious crisis is impending in France, and the never silent tongue of fame will proclaim the result!* Through the entire distance of 100 miles, villages and towns frequently occurred, but their names would possess little interest. I will, however, mention a few.

* Thus I wrote fourteen months ago, when all Europe was looking to the expected crisis of the election of May, 1852. The trumpet of fame has long since proclaimed, that it has been anticipated by the coup d'état of December 2, 1851, which made the President a Despot.

Tournus, a town of over 5300 inhabitants, was the birth-place of the celebrated painter Greuse, who died in Paris in 1805. Maçon, the centre of a great wine trade, with 12,000 inhabitants, makes a considerable figure from the water. Lamartine, the celebrated poet and orator, was born at this place. Here a bridge of thirteen arches crosses the river, and from it a view of Mont Blanc is obtained.

During our passage down this river, we observed striking evidences of commercial activity, in the frequent passage of steamers, having in tow long lines of freight boats, heavily laden, and gliding smoothly over this peaceful stream. Quiet as it now is, it occasionally undermines its banks, which, in several places, were sliding into the water. We were much impressed also by the great number and excellence of the bridges over the Saone, beginning at Chalons. Several were of stone; and we admired their solid and beautifully hewn arches, laid with perfect symmetry, in graceful curves. The greater number however were suspension bridges, having the usual elegant appearance of that kind of structure. Generally a high pillar was erected in the middle of the river, and the suspending chains or wire ropes were passed over it, making two curves, resting upon pillars less elevated on the shores.

Among the passengers, who numbered probably from seventy to eighty persons, there was, as in our American steamers, every variety of personal appearance. There was not, either among the passengers or the crew of the boat, any particular appearance of gayety of spirits: all were well behaved and decently clad.

As we approached Lyons, the banks of the Saone, before tame, although beautiful, became, especially on the right bank, bold and picturesque. Both sides rose into hills and rocky cliffs, and habitations became numerous; many of them were perched upon the high banks, where deep sections had been cut by art in the rocks, by Agrippa, to form a military road; and some had the appearance of villages.

As we came within the confines of the city, the houses re-

treated far enough from the river to afford room for a wide quay; and on both sides a street, with lofty walls of stone, rose abruptly to the height generally of six stories. Every thing bore the appearance of solidity and strength. For many miles above Lyons, and immediately contiguous to the water, the banks of the river were fenced by a firm wall of hewn stone, laid up in the most solid and beautiful form. We had also observed the same fact at all the small towns and villages that lay upon the river; and universally, the banks were provided with long stone steps, so that an easy and safe ascent from and to the water, was in that manner secured.

Lyons.

Being in no haste, our party remained quiet on board the boat until the other passengers and the freight were landed. In the mean time, we were at liberty to observe and speculate upon the panorama, both living and stationary, around us. Here we were in the midst of the ancient city of Lyons, in the interior of France—a city whose very lofty houses, as already mentioned, spring up from high river banks. We were in a living gorge—a deep valley, whose bustling population instantly fixed our attention.

Numerous porters were eager to carry every thing ashore: while the agents of hotels and omnibuses, with their cards, were prompt, but not obtrusive. All except ourselves were pressing up the plank that gave them a passage to terra firma. We beheld with astonishment the loads that were piled upon the backs of the porters, and could not have imagined that human shoulders could have sustained, or human limbs transported such an enormous weight. Large boxes of merchandise, such as with us would be laid upon a dray, are borne away by two or three men; and sometimes several such boxes were strapped or corded together, and lifted by other men upon the head and shoulders of the porter, who derived some protection from a

thick hat, furnished with a flap and pad, and lying like an apron upon the shoulders.

We were equally amazed to see travelling trunks piled upon the men in the same manner. Three or four trunks, large ones, such as are now commonly used by travellers, were banded into one mass, and then covered by hat boxes, valises, and travelling secretaries—such a mass as would load a barrow, and be no mean freight for a dray, was raised, by the united efforts of two or three men, to the head and shoulders of the courageous porter, who received his load with more than the patience, and almost with the strength of a camel; then he ascended the plank and the bank, without staggering or complaining, and with resolute good humor. If any one happened to be in his way, he would politely say, “Monsieur, pardonnez moi!”

We should have pitied these men if they had appeared to pity themselves; but they evidently regarded it as a common affair, and they were the best judges.

Quid valeant humeri quid ferre recusent.

Among our fellow-passengers on the Atlantic steamer, was a French gentleman from Lyons, doing business in New-York. Having formed his acquaintance, he most kindly proffered his services in our behalf in case we should visit Lyons. We owe it to the polite attentions of this gentleman, M. A——, that our apartments were already engaged at the Hotel de l'Univers, Rue de la Republique, ci-devant Rue Bourbon. Names, if not things, are greatly changed in France by the events of their last revolution. Liberté, Égalité, Fraternité, are every where inscribed conspicuously upon all public buildings, *prisons excepted*; but we observed that, with commendable prudence, as if anticipating the time when these honeyed words will become treasonable, they are not cut into the stone, but only painted, so that they can be easily effaced.*

* We did not, however, anticipate that within eight months from that time a despotic decree would go forth to rub out those pregnant words, as they were supplanted by a strong military despotism, under which there is neither liberté, égalité, nor fraternité.

Our hotel is kept by an Englishman, Mr. Glover, from Leicestershire, with a French partner. We had excellent accommodations—rooms and beds clean and good, with prompt attendance and courteous manners.

Having some time after dinner, we walked to the public square, La Belle Cour, a few yards from our hotel. It contains probably fifteen acres. In the centre of the square there is a large equestrian statue of Louis XIV. in bronze, mounted on a high pedestal. The horse is admirable for form and position, and the rider has a Roman aspect.

The square was all alive with people, walking in every direction, as for a promenade, and children were amusing themselves with puerile gymnastics. A man was bearing on his shoulders an establishment of toy windmills and other trifles, while the wind kept his light wheels in motion. Boys were playing at leap-frog, and one man attracted much attention by a team of goats, three in number, harnessed abreast, to a little coach. The harness adorned with silver and connected by chains. The goats were in fine condition, and seemed well pleased to draw their juvenile load. Crowds of people were streaming into the square, and one street seemed a moving river of human beings. As we proceeded into it, the concourse was explained. It being holy week, the churches were thronged, and the church of St. John, a very large building, which we entered, was almost filled with worshippers. Long rows of candles were burning about the high altar, while crowds of priests were performing mass.

April 18.—The next morning we visited the same church again, and found it equally full, and the candles burning as on the preceding evening.

We rode extensively through the town, and visited several institutions and public buildings.

We saw the Hotel de Ville (A. D. 1447 to '55),* a very large building of the middle ages, as its appearance, with

* Time of building.

lofty roofs and bold projections, indicated. It is on a square called Place des Terreaux. In this square in 1794, during the reign of terror, the guillotine deluged the pavement with blood. In this building sat the revolutionary tribunal, which under Challier, before the siege of Lyons, and after it, under Couthon, Collot d'Herbois and Fouché, dispatched many thousand human beings by the guillotine and the fusillade. Collot d'Herbois, the chief of these tyrants, had been an actor, and in that capacity, had been here hissed off the stage. He vowed vengeance against the town, and amply did the savage glut his desire by the sword and the dagger.

Museum---Manufactures---Troops.

We made a rapid visit to the Museum of the Arts and of Natural History. It occupies the vast quadrangle of a building formerly belonging to a convent. Here is an extensive picture gallery, and there are large collections in all branches of Natural History. Among the mineralogical specimens we noticed a fine suite of copper ores from Chessy, near Lyons, long celebrated for its green and blue malachites, and for its octohedral crystals of ruby oxide of copper. Among many interesting Roman remains, we saw the bronze table containing the speech made in the Roman senate by Claudius, when Censor, on the occasion of the question of admitting a part of Gaul to the privileges of Roman citizenship. The letters are cut in bronze, and remain perfectly distinct and well defined, as if they had been done yesterday. The plate was discovered on the heights of St. Sebastian in 1528. Claudius was a native of Lyons.

Two young gentlemen, from the mercantile house of our friend M. A., attended us to show the manufactures. Both devoted themselves to our entertainment during three or four hours; one of them, a native of Lyons, was perfectly at home in all the details of the manufactures. In a carriage, as far as it would serve, and afterwards on foot, we clambered up the

steeps of this almost mountain city, and ascended even to the attics of several of those houses that rise to a very inconvenient elevation. Not only did we find the houses usually six stories high, but some of them were seven, eight and even nine stories. Mr. B. assured us that he knew of one of fourteen stories, on the side of a hill, and that all the flats were inhabited. In these lofty houses, and sometimes in their highest chambers, even to the ninth story, we found the silk weavers and design makers at their work. We saw not only plain silks, but rich figured brocades and damasks; costly shawls were growing into beauty and splendor, when the elements, as in the case of the Gobelin tapestry and carpets at Paris, were only colored threads. When you stand by and see the forming process, advancing under your eyes, and hear the explanations, and are permitted to inspect every step as narrowly as you please, it appears after all, like magic, because the effect seems so far to surpass the cause.

We saw executed by the loom, in black silk, on a white ground, a beautiful portrait of Jacquard, the inventor of the silk loom, and also portraits of Prince Albert and Queen Victoria, both exquisitely done by the loom, and destined for the Crystal Palace in London.

From these silk looms we went to the pattern makers; who, having the pattern to enlarge, put the picture into a sort of magic lantern case and project its shadow on the wall, having first placed some ruled paper, such as is used for Berlin worsted patterns, in the focus. Then with a pencil they trace the outline and afterwards color it. It is now in a condition to be read. This is done by having as many threads or twine strings as correspond to the number of squares on the pattern; they are arranged in such a manner, with a sort of needle threaded on them, that if any one is pushed back it gives an impetus to the needle to move a bit of iron, which just fills up the perforations upon a steel die that is used in cutting the cards. This die has a certain number of lines of holes, and when these are used another is taken, and the cards that are cut by them are all numbered. The picture of Queen

Victoria and Prince Albert, with the young Prince of Wales, took 40,000 of these cards to make the pattern. This was woven in shades of black and white to correspond to an engraving, and at a short distance it could not be distinguished from one.*

The aspect of the poor weavers is miserable; they look as if they had not enough to eat, and are haggard and pale. The rooms are filled with looms, and in some dark closet stands the bed and in another the kitchen. In all the stories, even to the ninth, there are looms, but the different flats have no connection with each other, except that the people pass through a common entry, usually foul and offensive, and the stairs are often steep and tortuous. A carriage being a rare spectacle in these steep and winding streets and lanes, we were much gazed at. Some of our party went to see the velvet manufactory on the other side of the Rhone. They saw both plain velvet and plaid, under the hands of the weaver, and were surprised to see how simple the process was. Small wires of brass are used which have a little longitudinal groove in them, and as the shuttle is thrown, one of these is inserted like a mesh to make the pile, and a small knife is used to cut the mesh when two have been put in. After it is all completed, a man with a knife of the width of the velvet and a long handle, cuts off all the tall heads, and is very skilful in reducing the whole to an even thickness. They went also to see the complicated machine for making lace tulle. The owner of this loom, an Englishman, was most obliging in explaining it, and even took it to pieces to make it the more intelligible. It makes four breadths, and he has another which makes nine, but it was not then in operation.

* The artist, a plain man, who exhibited to us this optical process, refused money which I offered him, and his manner evinced a feeling almost of displeasure, that I should suppose he would receive a reward for an exhibition which was really very curious, and cost him some time and trouble.

This was the only instance of the kind which we met with in any country of Europe.

At the shawl dressers, they saw the process of cutting off the under woof, and also that of shearing them on the right side, and however rough and dirty they look, they seem to grow brighter and brighter every time the iron passes over them. They saw also the more common kind of shawls washed and dried, in a very few minutes, by being put into a copper vessel with a strainer and an inner cylinder. The cover is screwed on tight, and it is whirled very rapidly for three minutes.

They found the workmen on this side of the river looking much better and happier.

Among a population of 200,000 in Lyons, there are 60,000 looms, of which 12,000 are at present idle, and consequently there is distress among the manufacturers, who number 80,000. The price of the raw material, obtained chiefly from the neighborhood and from Italy, is at present high, and that of the manufactured articles is low.

The General of this military district has now 40,000 men under his command, with a large proportion of cavalry; there are 15,000 soldiers in the city, and the whole force can, at a short notice, be concentrated. We meet troops every where; many of them appear to be idle, wandering about the streets as they do in Paris. Most of them are young men, in the very prime of life, and a considerable number are in early youth.

Hill Fourbiere—View from the Tower.

Lyons stands on a tongue of land lying between the rivers Saone and Rhone. Both rivers have a considerable current, and the Rhone, coming from the high and snowy Alps, is liable to sudden increase, from the melting of the snows. It appears, at present, to be much swollen from that cause. It flows with so much force as to turn the wheels of floating mills anchored in it. Both rivers are turbid,

On the eastern side of the Rhone the country is level, and stretches away interminably in one vast plain, on which are numerous houses, extending far beyond the boundaries of the city. The Rhone is the eastern of the two rivers. The land on the west side of the Saone rises abruptly into high hills, and the city is built sloping up to the top, which is 630 feet above the Saone. There is, therefore, an upper and a lower town, and the approach to the former from the latter, is by stone stairs of ample dimensions, rising up the hills where they are too steep to be ascended directly by horses and carriages, whose route is of course circuitous. The houses that rise along up the declivity of the hills until they crown the summit, make a very conspicuous appearance. While the houses in Lyons are generally very high, the streets are very narrow; in general only wide enough for two carriages to pass with care, and sometimes they admit of only one. The immense walls of hewn stone, which rise on both sides to a giddy height, give the streets a very confined appearance; they are ill ventilated, often filthy, and in dark and gloomy weather they are very cheerless.

The ascent to the high tower called Fourviere can be made, although rather laboriously, on foot, by mounting the stone stairs that lead from the lower to the upper town, but we preferred a long circuit in a carriage along the line of the fortifications.

The ancient Lyons was built first upon these hills, which were occupied by the Romans, because the site of what is now the lower town was marshy and malarious, and the junction of the two rivers (such has been the progress of alluvial accumulation) was two or three miles higher up, than the place where the Belle Cour Square now is. A temple to Augustus was afterwards built on the spot where the Hospital of the Invalids now stands. Upon these hills as well as below, many Roman monuments have been found, and a great collection of altars, tombs, sarcophagi, and other imperishable monuments of Roman power, now occupies the lower corridor of the ancient

convent. The inscriptions have been pencilled over with red paint to make them more distinct; so that they are now quite legible and afford a rare treat to the antiquary. Many of the inscriptions are tributes to departed friends, and they often begin

“MEMORIÆ ETERNÆ,”

whether the letters M. D. in capitals, which are inscribed on all the monuments, mean *Magno* or *Maximo Divo*, I leave to the antiquaries to decide. In Rome itself we often have the same letters, especially on sepulchral monuments.

There was here among the monuments an immense stone bath, in two divisions, with a stone partition between, all excavated from one solid mass of rock. It was evidently a double bath and not a sarcophagus, because there were orifices for letting in the water and for letting it out; or, if it had ever been a sarcophagus, it had been converted into a bath. But there were in the collection several indubitable sarcophagi.

As we ascended the hills, we passed very high stone walls, crowned with battlements and furnished with loop-holes and embrasures. It is quite obvious, even to an unmilitary eye, that all this array of fortresses on a commanding acropolis, has but one object in view, that is to awe the insurrectionists of Lyons, and to crush them should they again rise, whether impelled by hunger or by ultra revolutionary views.

There are 18 forts in a circuit of $12\frac{1}{2}$ miles around the town, and 6000 men would garrison them. They command the lofty suburb of the Silk weavers which was the scene of the insurrection of 1831 and 1834, and the suppression of which cost 1000 lives.

At last we came to the summit of the hill at the foot of the tower, 630 feet above the Saone. An ancient church first attracted our attention, with a devout inscription in Latin, to *the Virgin*. Her interposition is stated in the inscription over the door to have saved Lyons from the cholera. This church is enriched with votive offerings, paintings, &c., with which its

walls are covered to the number of 4000. Below, in the city, we saw an appeal to the Virgin for salvation.

We ascended a tower called "the observatory," erected on speculation, a franc for entrance money and for the use of the telescopes being paid by each visitor. We did not need a telescope to enable us to range with delight over the glorious prospect—a perfect panorama of surpassing richness and grandeur. Behind us was the chain of mountains, including the volcanic regions of Auvergne, which had formed our S. W. boundary, all the way from Dijon. At our feet was the city of Lyons, its buildings and squares appearing quite distinct, but softened in all their features, the offensive courts and alleys being veiled; the town was mapped out to the eye in its whole extent along and between the two rivers; the Saone, a few miles above the city being occasionally lost to the vision in its windings among the hills, and the mountain-born Rhone, visible for many and many a league, in the direction towards its native glaciers, and flowing cold and rapid, is hastening to mingle its gelid waters with the warmer Mediterranean. We could also easily imagine that its almost intelligent current, could tell us if it would, of the lake of Geneva through which it has passed, and of the noble intellectual city on its banks, and of many a town along which it has flowed, and of scenes of deep historical interest which its waters have laved. At our feet also was the point of union of the two rivers, the nuptials of the powerful alpine flood with the milder waters of central France.

But, far off, in the boundary of the eastern horizon, we descried, with strong emotion, the snowy cliffs and ridges and slopes of the Dauphinese Alps; they stretched away to the right and to the left in a circle of fifty miles, and some of them probably to twice that distance. Mont Blanc itself, 100 miles off, can be seen from this place, in a fine sky, and by an instructed observer.

This hill of Fourviere was, in early ages, a scene of fearful enormities. Septimius Severus, who, at a blow, cut off the British Druids in Anglesea, here showed equal severity towards

the Christians of the second century, whom he massacred as is recorded, to the number of 19,000,* and threw their remains into a pit or well whose mouth may still be seen—as is said—beneath the crypt of the Church of St. Irene, who was martyred here. The site of this church is visible from the tower or observatory. It is asserted that the well overflowed with the blood of the Christians. The pit must indeed have been deep and large to have contained so many human beings. The slaughter of the early Christians was not confined to this hill. A great number were slain on the other side of the Rhone, near or beneath the Church of the Expiation. Polycarp preached where the Church of St. Irene stands. He and St. Pothinus were original propagators of the Gospel in Lyons, and both suffered martyrdom; Blandina also was murdered here; after being scorched in the fire she was thrown to the wild beasts.

I have already alluded to the massacres by the guillotine in front of the Hotel de Ville in 1793-4.

The same perpetration took place on a great scale upon the other side of the Rhone. The human butchers of those times, with Collot d'Herbois at their head, not satisfied with the comparatively tardy murder of victims by the guillotine, caused the citizens of Lyons to be arranged in dense masses and lines on the other side of the Rhone, and thus they were slaughtered by hundreds at a stroke, by discharges of artillery, and still many of the victims, although lacerated and mortally wounded, lingered on for many hours in agony, and were dispatched at length by the butts of the muskets or by the swords of the brutal soldiery. My own life having been coincident with the whole era of the French Revolution and its concomitant and consequent wars, I received at the time an indelible impression of its atrocities, and especially of those of Lyons.

All is peaceful here now; and there are no remaining marks of those horrid transactions, except a monumental

* This number is given on the authority of a small volume recently published here upon the history and antiquities of Lyons.

church over the remains of this cannonade. Lyons, the second city in France, has many important institutions, which our time did not permit us to visit. The public library, of 92,000 printed volumes, is the best provincial collection in France. It suffered very much by the bombardment in 1793; and the National Guard, by which it was occupied as a barrack, "lighted their fires, and boiled their coffee with the volumes, which they employed in preference to any other combustible. A cart-load of books was sent to a magistrate in the country every decade, for the same purpose; and the reason assigned by him for the sacrifice was, that in the age of reason they did not need books of devotion.

Lyons is adorned by many fine bridges—eight or ten over the Saone, and seven over the Rhone. There are several suspension bridges, but most of the bridges are of solid stone work. Several have colossal lions carved in stone, and reposing at the entrance and exit, as if to guard the passengers.

The church of Notre Dame, near the Observatory, is on the site of the Forum of Trajan. Lyons was a favorite residence of some of the Roman emperors. Augustus and Severus resided here. There are remains of a vast aqueduct, constructed by the soldiers of Mark Anthony; and the four great roads of Agrippa, leading towards the Pyrenees, to the Rhine, to the Ocean, and to Marseilles, may be traced out.

We left Lyons with a vivid impression of its importance, of the great beauty of the region, of the deep interest connected with its history, and still with fearful forebodings of impending calamity.

Lyons to Valence.

April 16.

We took our departure at noon in a steamer for Valence, which is situated on the Rhone, sixty miles below Lyons, and nearly half the way to Avignon. The boat did not leave Ly-

ons at an hour sufficiently early to reach Avignon that night, and we, therefore, stopped at Valence over Sunday.

Our passage down the Rhone was very interesting. The weather was fine, and a summer temperature, which we felt first at Lyons, had now overtaken us after a cheerless month. The air had been prevailingly chill and raw; and our fires, since we left England, where coal is always a resource for warmth, had been limited to a scanty supply of wood.

VIENNE.—The first place which we passed possessing any interest was Vienne, a Roman town of ancient Gaul. Ruins of a Roman temple are still in existence there, as well as other relics of that powerful people. In a field below Vienne is a Roman obelisk seventy-six feet high, and supposed to be a sepulchral monument; it is without an inscription. This place is also connected with early ecclesiastical history. It was "the cradle of Christianity in the West. The epistle of its early martyrs to their brethren in the East, is a very instructive and perfectly authentic document."

Tradition says, that Pontius Pilate, after being removed from his government, was banished by Caligula, A. D. 40, to Vienne, where he ended his miserable life, as is asserted, by suicide. Vienne was in existence before Lyons was founded. Its population is 17,000, and with a village on the other side of the river, it makes a considerable figure. As the passenger in the steamer sees it from the deck of the boat, rising, as it does, upon a side hill, its appearance is imposing; but it has the same rough aspect which is generally seen in the smaller French towns, in which the buildings are generally disposed in almost total disregard of taste and of convenient arrangement.

Since we left Chalons, which is in about 47 degrees of north latitude, we have been passing rapidly south, and are now in 45°, having gained four degrees from Paris. The effect, both on vegetation and on our comfort, is exceedingly sensible, although we are still further north than the White Mountains of New Hampshire, which are, no doubt, at this

time—the middle of April—covered with snow far down their sides.

Vegetation is here far advanced. The trees have put forth their leaves, and not a few are in blossom. There are many towns on the Rhone, between Lyons and Valence, but most of them are inconsiderable, and I have not noted their names. Tournon, on the right bank, standing at the foot of a mountain, still shows several ancient castles on the rocks; and having been possessed by the Counts de Tournon and the Dukes de Soubise, it was much in favor with the French kings, especially with Francis I. Below the bridge stands the College Royal, still apparently in good repair, once a Jesuit college and more recently a military school. The population of Tournon is about 4000. The Rhone, just below Tournon, receives the Iser on the east. The country along the river is, on both sides, hilly, and in some places mountainous.

The feature which most interests the traveller is the universal cultivation of the vine, almost to the exclusion of every thing else. The hills are terraced, even where they are quite steep, and the terraces are carried to the very top. There is a particular region, called Côte Rotie (the roasted hills), where the exposure to the sun is such in a semicircular bend as to give great perfection to the grapes, and the wine is therefore much valued. Still more prized is that of the so-called Hermitage, a few miles below Tournon. It is said to have derived its name from a real hermitage, once existing upon the mountain, which is high and rugged, and very unpromising.

Only about 300 acres are regarded as particularly productive of those grapes which yield the Hermitage wine, so celebrated throughout Europe and in America. Indeed, only an exceedingly small portion of the 300 acres produces the very best wine. The grapes are raised at a place where the limestone crosses or intersects the gneiss rock, of which the mountain is composed.

All along the banks of the Rhone we have seen immense quantities of rolled and rounded pebbles, the produce of the

high valleys by the action of the mountain torrents, and of the Alpine glaciers. As regards the movement, and the wearing by attrition, the work has been finished by the waters of the Rhone, which often flows violently at a much higher elevation than the present surface of the river.

We have been somewhat surprised to-day to see, on our right, a mountain covered with snow, although apparently not much higher than our Alleganies, but in a higher latitude.

Before us on our left, extending far to the east and north, we have been delighted to observe as we came nearer to them, the fuller development of those snow-clad Alps of Dauphiny, which we first descried yesterday from the tower in Lyons. These mountains had now become quite distinct, even to the naked eye, and with a glass they appeared very grand, presenting snowy peaks and ridges and valleys, and extended brilliant slopes of pure unspotted snow. It was a glorious vision, and to have seen any, even the nearest of the snow-clad Alps, had been almost worth a voyage across the Atlantic. Some of our French passengers, and one old gentleman in particular, took pains to point out to us interesting objects as we passed along. We arrived at Valence before evening, and found a carriage and guide in waiting to conduct us to our Hotel la Portè, and there we found our apartments ready for us, having been pre-engaged by letter by our provident courier.

A SABBATH IN VALENCE. *April 20th.*—In the morning we lingered for a short time in the cathedral, where we saw, in more than common splendor (it being the first Sunday after Lent), the imposing ceremonials of Catholic worship. The bishop presided; the priests and all the attendants were gorgeously arrayed, and many ceremonies were performed which were entirely unintelligible to me. The cathedral was full of people, both worshippers and observers, and there was great activity of movement in the attendants, several of whom were boys.

After a short time we withdrew and went to the Protestant chapel, where we remained more than three hours with much

satisfaction. The communion was administered. "I am the resurrection and the life," was the text of a fervent discourse, followed by addresses by the Rev. pastor, M. Romaine; the communicants came up to the table, two by two, and received the elements at his hands.* Not knowing exactly the rules of the place and occasion, we followed the example of some English people from our hotel, travellers, like ourselves, who approached the table, to which we also went, and received the elements from the hands of the pastor. The people generally went up two and two; we went up three in number, and a brief address was made by the pastor as he presented the bread and the wine; it was not a form of words, the expressions were varied, and the manner was at once solemn and affectionate. To us it was a very interesting scene; we were, for the time, identified with the representatives and descendants of the Huguenots, who, after centuries of persecution, still preserve the individuality of their religious existence.

Although the people of this congregation (the men and women being on opposite sides of the church) were humble in their appearance, the scene was very interesting; their demeanor was serious and devout, and the decent plainness of the church and of the dress of the worshippers, made it the more gratifying.

Towards evening the reverend pastor, Romaine, called upon us at our hotel, and we had a very interesting interview with a refined Christian gentleman of middle life, who appeared gratified to meet persons from a distant continent, who cherished sympathies for his little flock and their spiritual guide.

Valence contains 10,000 inhabitants; it is an ancient town, entered by arched gates, and still retains its walls, towers, and battlements.

Pope Pius VI., returning from his exile in France, died here in 1799. The church contains a bust of him by Canova. Napoleon, when a poor sub-lieutenant of artillery, lived in this

* He had previously read the account of the institution of the supper, "do this in remembrance of me."

town in a house that is well known, and in the Champs de Mars here he made some of his first essays in the art of war. In the public square we saw a colossal bronze statue of Champollionet, one of Napoleon's generals, who was a native of Valence.

There is here a school of artillery, and the town is at present alive with military men.

We had a comfortable hotel, with clean beds and excellent attendance. One of the attractions of the place was an immense white dog, higher than the table, and as gentle as he was large. The breed was new to us, being larger than our so called Newfoundland, or the celebrated St. Bernard.

VALENCE TO AVIGNON.—This voyage was accomplished in less than six hours, the distance being from seventy to seventy-five miles. As we proceeded down the Rhone, it expanded into a broad river, whose current appears to be four to five miles an hour.

The borders of the river were hilly and sometimes mountainous; occasionally the rocks were distinctly stratified. The mountains were almost universally terraced up their rocky sides quite to the top; they were now in the form of cones, now of projecting cliffs with deep gorges between them. Upon many of them we saw the ruined castles of a gone-by age; there is little in their history that is distinctly known, and still less that is worth recording.

THE PONT ST. ESPRIT is near a town of the same name, having 4500 inhabitants. This bridge is indeed a noble structure, and makes a grand appearance; it is 2717 English feet long, or more than half a mile, and is said to be the longest stone bridge in the world; it is somewhat angular, projecting up stream, and its arches, or rather the pillars on which they rest, are pierced with holes, to let the water through in times of flood—an excellent contrivance. It was begun in 1310, by an association in the town, and finished in forty-five years. It was built entirely by contributions of people on both sides of the river. We thought this bridge one of the most remarka-

ble productions of hydraulic engineering which we had seen, especially when we remember that it was finished 500 years ago.

The rapidity of the current of the Rhône formerly made the passage under the arches a subject of anxiety, but our boat passed without fear, the helmsman giving the vessel a quick and sharp turn, the moment she had cleared the arch.

Avignon.

This place acquired great celebrity in the 14th century, from having been the residence of the popes. The papal palace was begun in 1319, and for the greater part of that century (from 1305 to 1377, 72 years) it was occupied by the popes.* The palace of the popes, now degraded into a barrack and a prison, is magnificent from its vastness, and very impressive in spite of its present degradation and mutilation. Its walls are 100 feet high, and some of its towers 150 feet. We entered the chapel of the old palace; it is not large, but is beautifully embellished, and is still in good order. There are in it sepulchres and monuments for several of the popes. The rest of the palace, although it is very large, is entirely altered, and is occupied by soldiers and prisoners. The place of the Inquisition was inaccessible to us. We saw that high tower in the palace down which the victims were thrown, during the French Revolution. Sixty persons, of both sexes, probably for no crime whatever, were precipitated through this lofty tower, and their mutilated forms were covered with quicklime.

Contiguous to the palace, upon a high rocky cliff, rising far above the river, there is a flat area, or parade ground, which

* The first pope of Avignon was a Frenchman, which appears to have induced the removal to France. The Catholic historians call this *the Babylonish* captivity of the popes.

is guarded by a stone wall. From this platform, and over the Rhone, there is a splendid view of the surrounding country.

On the opposite shore are the remains of a fortress, erected by the French kings, in opposition to the power of the popes, when this province (Provence) belonged to them. The town connected with the fortress was called Villeneuve. A bridge, long since broken down, once united the two towns; several of its stone arches still remain, and it now forms a beautiful ruin.

We walked with some pain and inconvenience on the small round stones, for there are no side-walks, or only those that are very inconvenient, through the crooked streets of Avignon, which are very narrow. We entered several churches where the Catholic ceremonies were being performed. We saw also the ruins of other churches, destroyed during the Revolution. In the time of the popes there were thirty churches, numerous convents, and 80,000 people; the number is now between thirty and forty thousand.

The fury of the revolutionists assailed the College of the Jesuits, which is mutilated, although still standing. There is also in Avignon a large college, now in operation, for the education of priests for the Romish church.

But the most interesting thing which we saw in Avignon, was a museum containing many pictures and medals; the latter collection is said to be the most extensive in France. The collection of the pictures by Horace Vernet, was admirable; he was born here, and there is a statue of him in the museum. He used to go out in the most violent tempests, for the purpose of seeing nature in her most stormy moods; in storms at sea he would suffer himself to be tied to the mast, and certainly the waves in his pictures look as if they are really in motion. The principal glory of the museum, however, is a very large collection of Roman antiquities, found in this vicinity. It is almost incredible, and would be quite so, were they not actually presented to our view, that so many and so various objects, illustrative of the manners of that extraordinary peo-

ple, should have been found so far from the principal seat of their dominion. There are many glass vases, that have been taken out of Roman tombs, and several of them contain the ashes of the dead; they are irised by partial decomposition, due to long interment, and possibly the exhalations of the grave, like those found at Athens. There are rings of gold, mirrors of metal in female caskets, sepulchral urns, a head of Jupiter in agate, and the last seal used by the Inquisition. There are penates in many forms; there are swords and other weapons; eagles, which were borne at the head of the Romish legions; sacrificial knives; sepulchral lamps, some of them of fine material, and all of beautiful model; coins, chiefly copper, in great abundance and variety; sepulchral monuments and sarcophagi, and mythological statues. There is one room devoted to the monuments of the early Christians.

Avignon was entirely inclosed by a wall, which is even now nearly complete. It was an elegant structure of stone, finished with a handsome cornice, like the frieze of a building, and as far as we saw the wall, a deep ditch still runs all around. This interesting city is in the midst of a beautiful country, and is a capital object for the traveller in this part of France. It was with no small regret that we relinquished the cherished design of visiting the fountain of Vaucluse, which, however interesting from its sentimental associations, is still more so as regards its important geological bearing upon the hydraulic machinery of the earth.

Avignon to Nismes and Arles.

Railroads are excellent in France; and as the police established for their management is very strict, safety and comfort are insured to the passengers.

We took the second-class cars to-day, and found ourselves very well provided for at a quarter less charge for seats.

These cars are cushioned, have stuffed backs, and are sufficiently good.

At Tarascon and Beaucaire we passed from one train to another by an omnibus, as a new road is now in progress and the two parts are not yet connected. These towns had in early centuries great importance. A wire bridge of 1446 feet long, with four towers, connects them. Tarascon has 11,000, and Beaucaire about 10,000 inhabitants: the latter has a large castle, apparently not much injured by time; it stands upon a rock on the brink of the river. On a high contiguous hill stands the Chapel of the Holy Cross, to which we saw great numbers of pilgrims resorting—climbing the hill in squads, doubtless to avail themselves of the great healing virtues attributed to this chapel.

ROMAN AMPHITHEATRE.—Having left Avignon at 7 A. M., we reached Nismes soon after nine, and had five hours at our disposal to see the place and its interesting antiquities.

Nismes and the vicinal city of Arles were, for a long time, seats of Roman power. The vast amphitheatres existing in these places prove their ancient importance. That at Nismes, having been disencumbered of all surrounding buildings, now stands out in bold relief at the bottom of the principal street, and is indeed a most impressive object. There is no occasion to visit Rome to see the Coliseum, for the amphitheatre of Nismes is so nearly perfect, that it at once conveys to the observer exact conceptions of this kind of structure. It consists of two stories, each of 60 arcades, 70 feet high, the tower arches serving as so many doors. There were originally 32 rows of seats, and it is estimated that it would contain twenty-two to twenty-five thousand people. Corridors, both above and below, ran around the whole of the building; we made the entire circuit, and diverged into the subterranean vaults and sub-structures which are carried out far and wide. In these were confined the wild animals, that they might be brought into the arena when required, and directly opposite is the room where the men slain in combat were deposited until their burial.

The vaults of the lower corridor or portico are like some vast natural cavern ; the upper one is roofed with huge stone beams, 18 feet long, reaching from side to side, many of them cracked and some of them fallen. One is astonished at the magnitude of the stones of which the structure is composed.

It is built of limestone in immense blocks, laid in courses with perfect regularity and without mortar. Mortise holes in the centre of the upper surface of each block show that the Romans employed the same means still in use, to raise and handle large masses of stone. The accuracy of the masonry seems the more remarkable if we consider the elliptical form of the structure, making all the vertical joints converge to the foci of the ellipse. In one place we saw a line of light through a joint of this sort where the wall was at least four feet thick. The passages, of course, all expand outwards also, and thus admit of a speedy evacuation of the amphitheatre through its sixty *vomitoriae*. The dimensions of this ellipse are 437 by 322 feet. By walking deliberately around the structure, these dimensions are more readily realized than by a numerical statement—the circuit is a quarter of a mile.

The cornice was decorated with carving and finished with a frieze ; except in the portion corresponding to nine or ten arches, the capping and cornice are complete around the entire circuit. In the part where the cornice is deficient, the Saracens, more than 1100 years ago, erected two towers, which were destroyed by Charles Martel, and fire applied by him disfigured the amphitheatre. As it was all of stone he could not destroy it, but the wood placed in its arches and corridors burned as in a furnace. He wished to destroy the building, which had often been used as a fortress in the numerous wars that followed the downfall of the Roman Empire. He succeeded only in blackening it with smoke which remains to this day. The heat, however, caused some portions of the limestone to flake off ; but very little progress was made towards the destruction of the amphitheatre. The building is national property, and the French government has restored many of the arches, laid anew the pavements.

and has taken precautions to guard against further dilapidation. The exterior of the building is, indeed, somewhat corroded by time, but had war and violence been restrained, this noble monument of antiquity would have remained, an architectural wonder to all future ages. Many of the rows of marble seats remain entire, and enable the observer perfectly to understand the whole arrangement. The Emperor and his household entered by a lower and special corridor, and the vestal virgins by a corresponding opening on the opposite side. The senators and patricians entered higher up, while the plebeians, entering still higher, occupied the more elevated positions, and the slaves the uppermost of all. The police also had their appointed place.

Projecting outward from the cornice at regular intervals were stones, pierced with holes six inches or more in diameter, through which passed poles to sustain the awning, the lower ends of the poles being sustained by corbel stones projecting from the wall below. The amphitheatre had no other covering but the awning, and this, on occasions of the use of the building for public games, was stretched upon ropes crossing from side to side of the arena. This covering secured the spectators from sun and rain, while it permitted free ventilation.

The gladiators entered on one side of the arena and the wild beasts on the other, and probably the same rule prevailed when gladiator was to contend with gladiator. Here man fought his fellow man, or with the fierce wild beast, to pamper the cruel appetite for blood. Strange feelings of awe and grandeur are excited by seeing the vast space so often filled with human beings, and one's mind runs wild with excitement when he sees in imagination, the lion's eye glancing at the grating until he was enlarged to spring upon his victim.

The weeds and grass now grow among the seats, and green-sward covers the once ensanguined arena. The little lizards leap from stone to stone, and their brief generations are now the sole tenants of these ancient piles.

ROMAN TEMPLE.—A very interesting building, the *Maison Carré*, is believed to have been a Roman temple erected by Adrian. It is of Corinthian architecture, and is supposed to have been consecrated either in the reign of Augustus or of Antoninus Pius. It stands conspicuously in the midst of the beautiful city of Nîmes. In the progress of many centuries, it has been used as a Christian church, and also for many ordinary purposes, some of them of the lowest character. The fine Corinthian columns of this building, 30 in number, have been much corroded by time, and two that were contiguous were mutilated in the flutings to make more room for the passage of a farmer's cart when the temple was used as a barn or stable; and, to afford more accommodations, walls were built up between the columns of the portico.

In the eleventh century it was used as town-house, or *Hôtel de Ville*. When attached to the Augustine convent it was employed as a sepulchre, and in the days of terror the revolutionary tribunal held its meetings here. The building is at present occupied as a museum.

It contains many interesting objects, especially Roman antiquities: the pictures are not remarkable. There is in it a beautiful Mosaic pavement taken up entire from a Roman house. This temple is supposed to have been only the centre of a much larger building, extending with wings and long colonnades to the right and left, whose foundations have been discovered.

Two of the original Roman gateways of Nîmes are still standing, and are very conspicuous objects. That of Augustus was founded B. C. 16. It is now in the midst of the town, and consists of a double arch, with two side-doors for foot passengers, and is flanked by two towers.

Fountain of the Nymphs.

From this noble fountain flows a stream, so copious as to fill a large canal handsomely walled with stone. Here we found a large number of women—according to continental custom, washing clothes in the open air along this flowing water. They are on their knees or their feet, as the case may require, washing, rinsing, wringing and spreading, and their own apparel is so disposed of as to avoid wetting. There is in such cases no appearance of being disturbed by the presence and observation of strangers; it is the custom of their country, and in some respects, more convenient than ours, as they have the greatest abundance of water without trouble.

We were much amused to see among the washerwomen at the canal, a man who had high tin boots, in which he stood to keep his feet dry, while he pounded out his dirty clothes to make them clean.

Through splendid avenues of grand trees we walked onward to the Fountain of the Nymphs, which is situated in the midst of a beautiful garden or park, and adorned with statues and vases.

This fountain made us compensation for the loss of that of Vaucluse. It appears at the foot of a wooded hill, and the fountain rising in a living stream from the earth, occupies a large area apparently 150 feet by 100; perennial springs give it a depth of fifty feet. The water is pellucid and without sediment or any disagreeable association, so that it well deserves its classical name. If the nymphs did not bathe there, the Roman women found it a delightful spot for their ablutions. There are subterranean rooms or galleries for their accommodation, to which we descended. The walls and those of the canal are, in part, ancient Roman masonry. The whole was repaired under Louis XV. The surrounding park adds very much to the attractions of the place; the trees are the largest

and finest that we have seen in France, except those at St. Cloud. This grove is a part of a Boulevard which encircles Nîmes; it has taken the place of the ancient fortifications, and gives a very attractive appearance to the city.

The supposed *Nymphæum* or Temple of Diana is an interesting ruin. It is in the side of the wooded hill, above and to the left of the fountain. It was originally semicircular, but the roof has fallen in, and the building was ruined in 1572. It is now cleared of its ruins, and we walked into it without impediment. Although defaced, the building is still picturesque.

Near it is the termination of the Pont du Garde, a famous aqueduct built by the Romans, of three tiers of arches; of the lowest there are six broad ones; the second, whose span is narrower, has eleven arches; and the highest, much smaller, has thirty-five. It is 180 feet high, and brought the water of certain springs 25 miles, to Nîmes and other places. By means of it the arena of the amphitheatre could be flooded for the Naumachie. Under the direction of our guide we now wound up a path, overgrown with shrubs and trees—some unknown and some familiar. We came next to a door in the stone wall, and now we had reached the top of the temple, and through a crevice in the roof, and from a deep chasm behind the middle arch, we fancied we were let into some of the mysteries of the oracle, and could understand how the priests of the Roman time could utter responses from behind these arches. There is, too, a subterranean passage all around the temple, and leading in the direction of the baths. Fifteen months since, excavations were made on the hill, and a large mosaic pavement, in perfect preservation, was discovered 15 or 20 feet below the surface.

While we were walking in the garden, the guide called to his little daughter to make up a bouquet for the ladies, and she soon came back with her hands filled with roses, corellas and lilacs, quite nicely arranged. All the French seem to love flowers, and for the last two or three days large bouquets have been presented to us by the landlady who attends to the rooms.

Nismes is a thriving town of 40,000 inhabitants, of whom 12,000 are Protestants. It has more outward signs of prosperity than any town we have yet seen in France. The streets are wide and well shaded by large trees; many of the houses are constructed with taste, recede from the street, and being built of a light-colored sandstone, they have a fresh and agreeable appearance.

Progress of the Season.—Although we are in the forty-fourth degree of north latitude, fully as far to the north as Dartmouth College, in New Hampshire, the vegetation is as much advanced as that of Philadelphia or perhaps Baltimore. Since we left Avignon, we have for the first time seen olive and almond-trees.

The olive-trees extend over large tracts of country, growing here, in general, not higher than a man's head, with a blue green color and a pointed leaf. They appear not only in the plains but among the rocks, and wherever a tree can be made to grow; and the same is true of the almond.

The south of France is a well known region of the olive, and Marseilles is a principal port for the exportation of its oil. The mulberry is also cultivated to a considerable extent in this region. The olive is not a handsome tree: its dull blue-green leaf, and squatty maple or apple-tree shape, seem to cover the earth as though it was obliged to exist, and could not throw forth its arms in exuberance of life like the more joyous green and fairy floating spray of the almond.

Arles and its Amphitheatre.

Arles is only a very short ride from Nismes. Under the Roman empire, it was one of the most important cities of Gaul. It has now about 20,000 inhabitants. It lies on the left bank of the Rhone, twenty-eight miles from the sea. Its vast amphitheatre attests the great population and importance of the

place in the age of Roman glory. It appears extraordinary that two such amphitheatres should be erected so near to each other.

That of Arles is 459 feet long by 338 feet broad, exceeding that of Nîmes by twenty-two feet in length and six feet in breadth. This amphitheatre, like that of Nîmes, is in the midst of the city, and is a very striking object, although it is much more dilapidated than its neighbors. The cornice is entirely gone, quite down to the upper row of arches; but it has three Saracenic towers (or, as some suppose, they may have been erected by Charles Martell), still standing upon the wall, and there were originally four. We ascended to the summit of one of them, forty or fifty feet above the top of the wall, and enjoyed an extensive prospect. These towers may be 1000 or 1100 years old; and their great age is indicated by the worn condition of the stairs, which wind spirally around, in the interior. This amphitheatre has fine corridors; it had forty-three rows of seats, and was capable of holding 25,000 people. It consists of two stories of sixty arches, the lower Doric, the upper Corinthian. The blocks of which it is composed are of enormous thickness; and, as the ground was uneven, there were great structures beneath to bring the work to a level.

The walls are of astonishing thickness; and there are many more, and far more extensive vaults than in the other amphitheatre.

Its interior is much more despoiled than that of Nîmes. Most of the marble seats have been carried away; but the marble slabs, which are perpendicular facings of large dimensions, are in a more perfect condition. They were very accurately fitted to each other.

This amphitheatre, supposed to be of the age of Titus, like that at Nîmes, has been used as a fortress in various wars; but, notwithstanding its dilapidation, it is still a very magnificent ruin. The masonry is very perfect, and put together without cement. This building was, until within a few years, choked up to the height of twelve feet by rubbish, and its

arched passages and vaults were inhabited by 2000 people of low condition ; but both the rubbish and the people have been removed, and thus the foundations were disclosed.

Near the amphitheatre are the ruins of the ROMAN THEATRE, once a grand and beautiful structure, but destroyed, as it is said, by the zeal of the early Christian bishops. Two columns are standing in place with their capitals. One column is composed of a beautiful brecciated marble, and the stump of the alternate column is of the same ; they formed a part of the proscenium. Rich friezes, and entablatures, and broken columns, strew the ground. The seats were cut in the solid rock, and remain very perfect.

Arles has none of the appearance of thrift and prosperity noticed at Nismes. Many dirty, forlorn-looking children were playing upon the ruins of the theatre, and the population appeared miserable. Still, the women showed some ambition in their head-dress, which was composed of a velvet, plain or figured, wound twice around the head at the height of the forehead ; and above this, a rich piece of lace stands like a miniature capote.

A crowd of dirty boot boys zealously contended for our custom ; and we were forced in self-defence to give one foot to each couple, while we waited at the hotel door for our valet de place.

Two granite columns built into the walls of the Hotel du Nord are the supposed remains of a forum.

Several objects of interest from this theatre are in the museum. Statues found here are both in the museum and in the Louvre at Paris—one is called the Venus of Arles. There are niches in the dividing wall of the theatre where statues once stood. There are openings for doors, through which the actors entered and retired, and walls in the substructures, which once supported the orchestra and the stage, are still visible.

In the *Palais Royal*, and near the *Hôtel de Ville*, there stands a granite obelisk, which we saw. It came from a quarry near Frejus, and was found in the bed of the Rhone, and placed

in its present position in 1676. It is supported on four lions, and crowned by a gilt radiant sun with a human face. Its height is forty-seven feet.

In the museum there are many remains of the architecture and ornaments of the theatre; and also a lead pipe, forty feet long, which was found in the bed of the Rhone, stamped with the name of the Roman plumber.

Arles, once abounding in water, brought by the Romans from a great distance, is now so ill supplied that the health of the people suffers, as well from bad water as from the marshes and pools in the vicinity.

To Marseilles.

We passed in one day from the ruins of Avignon to those of Nîmes and Arles, at extreme distances of from thirty to forty miles, and night found us at Arles.

We waited for an evening train to take us to Marseilles; and as we passed this distance in the night, between eight and eleven o'clock, I can say nothing of the flat and marshy country, now in a great measure redeemed for cultivation. By the care of our courier, we found our apartments ready for our reception. Our circumstances here were not favorable to observation.

Marseilles is the third city in France, with a population of 190,000. It has an excellent harbor, a large and land-locked bay looking to the south and west. A natural oblong basin, communicating with the harbor, extends into the heart of the city. It is 1000 yards long by 330 broad, with an area of 70 acres. In it the ships are seen among the houses. A new harbor is being constructed with heavy hewn stone, skilfully wrought, and laid up with massy firmness. Marseilles is a very ancient city. It is said that the Phœceans founded it 3000 years ago. It has an important commercial connection with

the United States ; and we have here an active and intelligent consul, Mr. Hodge, to whose kindness we have been much indebted.

With some toil we climbed to the top of a very steep, high, and stony hill, where there is an ancient castle, and the Church of *Notre Dame de la Garde*. The chapel is filled with votive offerings of many seamen and others, presented by those who have been saved by the Virgin. One of the ladies of our party entered the chapel, and found it filled with pictures, which were mere daubs, representing every species of exposure to death ; and on the wall were hanging numerous crutches of those who have been restored ; and ropes-ends which have saved some from drowning, preserved with religious veneration.

We observed a very large bell in the bell-tower, placed here by Madame Reget. It is covered with beautiful bas-reliefs.

This chapel would hardly repay one for climbing this very stony promontory ; but compensation is made by the grand view which is seen from the summit. The prospect is very extensive : the magnificent harbor, with its rocky islands, was in full view, and the city, with numerous ships, was at our feet. An immense number of hills and mountains of limestone nearly white, filled the land prospect all around, rising like sharp-crested billows, and gave a repulsive appearance of dreariness and sterility ; but the country between the hills and the city was dotted here and there with green plantations of vineyards and olive gardens, and covered all over with white cottages, called *bastides*, which are the country places of the citizens. It is said that there are five to six thousand of them. The blue waters of the Mediterranean form a soft outline to the dazzling brightness of the limestone hills. The forbidding appearance of the country around Marseilles presents a strong contrast with the beauty and fertility of many regions in France through which we have travelled. This absence of fertility here, in connection with the noble harbor, indicates that commerce must be, as it is, the great dependence of this city. Indeed it would never have existed but for its harbor, which first drew the Gre-

cial to it, and has attracted commerce ever since. The depth of the water is from eighteen to twenty-four feet at the mouth of the harbor, which is capable of holding 1000 to 1200 merchant vessels. The annual arrival and departure of vessels amounts to 18,000, with a tonnage exceeding 2,000,000. The trade with Algiers centres here, and is a great source of prosperity.

We found time to drive around the city, and down to the new harbor. It is separated from the great natural basin by a stupendous wall of hewn stone—a breakwater of nearly three quarters of a mile long, and at about the same distance from the shore. It is so divided by moles as to form two inner harbors and an outer one, and both are connected with the present inner harbor by an interior canal, running within the two strong forts which defend its entrance. The old town, from the extreme narrowness of the streets, is hardly accessible to carriages.

Marseilles is regarded by its inhabitants as a healthy city. It is nothing against this opinion that, 130 years ago, it was desolated by the plague, when half its inhabitants, forty or fifty thousand, were carried to the grave. I have remembered from my childhood, those beautiful lines in Pope's *Essay on Man*, in which he alludes to the benevolent efforts of the good Bishop Belzunce, who, during the plague, devoted himself to the dying and the dead :

Why drew Marseilles' good bishop purer breath,
When nature sickened, and each gale was death ?

In 1839, it was desolated by the cholera, which took off its victims at the rate of 1000 to 1500 in a day. The city, being environed by naked limestone hills and mountains, is very hot in the summer, and infested by mosquitos.

The lazaretto of Marseilles covers fifty acres, and contained the whole French army on its return from Egypt, in which country, however, and the vicinal regions, most of the soldiers who left France in that expedition found their last home, being

thinned out frightfully by the casualties of war, and by disease, and by many modes of privation and suffering. It is said, that if, at the present day, a case of plague appears in any vessel at Marseilles, the vessel is sunk, and the goods are burned.

A large manufactory of soap is carried on here which employs 700 men; and as only vegetable oil is used, the manufacture is not offensive.

On the whole, Marseilles does not impress us as a city in which we should care to linger longer than business or a hasty survey might require.

OUR COURIER. *April 25th.*—Much difference of opinion meets the traveller who asks if he shall employ a courier. Our French friends in Paris were earnest in their efforts to persuade us to do without one, but our experience has convinced us that a good courier is a most important member of a large travelling party, on the Continent. One must speak fluently, not only French but also Italian, and be able to chaffer in it too, to make it at all safe to travel in Italy without a courier. Others have undoubtedly been annoyed by dishonest and offensive persons in this capacity, but it has been our good fortune to secure the services of a courier of great integrity and fidelity. In America we have no parallel to some of the incidents of European travel. Unity of language and absence of passports in the United States, reduce travelling to entire simplicity.

Justice demands of me a word in commemoration of our good courier, François Ribery, who has served us so well. A Parisian by birth, he has from his youth been employed as a courier, either in a public or private capacity. For several years he was valet to Marshal Ney, and, by his influence, was adopted by Napoleon as one of the couriers of the grand army, and remained with him to the disastrous close of the ill-fated Russian expedition. He retains a decided military manner, and habits of the most rigid punctuality. He expects all the luggage to be ready a full hour, and ourselves half an hour, before the time of departure. He pays all our bills, and makes all contracts for transportation, and looks with the most me-

thodical care after all our luggage. He is sensitive at being interfered with in his department; all he wishes to know is, our plans as to time, place, and mode of conveyance, and he considers all the details of execution as within his own province. Italian he speaks even in preference to his native tongue, and his use of English is very good. In German he does not consider himself proficient, but we found no difficulty when in Germany from this deficiency. He is known everywhere by hotel keepers, and the numerous throng of commissionnaires and valets de place. His wages are 280 francs a month, he paying his own living, which of course he receives from the hotel keepers. He keeps all our accounts in a most orderly manner, renders vouchers for all his expenditures, and is decidedly more watchful lest we should be imposed on or pay too much, than we could possibly be for ourselves. He keeps a sharp look-out that our dinners are well cooked and abundant, always going himself to the kitchen to see that all is *comme il faut*, and he is certain to have us all stirring at an early hour in the morning, when we are sure to find breakfast waiting. When questioned, he narrates some of the events of his varied and active life, particularly in connection with Napoleon, and in this way, and by the road, we have by degrees obtained the history of his life. He does not, however, speak of his adventures unless invited to do so, and makes but little of his sufferings and exposures. He was at several of the battles before and after the burning of Moscow, and saw the French cavalry ride into Moscow, and the frozen riders drop dead with cold and hunger from their horses. At Wilna, in Poland, on the retreat, he received from the hand of the Emperor Napoleon the confidential dispatches for the Empress Marie Louise, to be delivered by his own hand at the Tuileries. After the most exhausting fatigue, and when one horse after another had given out, and the courier had been repeatedly lifted into his saddle, he accomplished his mission, and received as a token of satisfaction from the hand of the Empress seventy golden Napoleons.

He was at Jena, at Friedland, at Eylau, and at the crossing of the Beresina, and at many other terrible battles.

François has been repeatedly the courier of the distinguished English engineer, Mr. Stephenson, with whom he was in Egypt last winter. He interested us with his account of Mrs. Caroline Fry, with whom he travelled on more than one of her benevolent tours of philanthropic effort; and who makes honorable mention of him in her memoirs.

By the kindness of Mr. Rives, our minister at Paris, we had obtained one general passport for all our party, and this saved us great annoyance, and no small expense, as one *visée* and one fee answered for the whole.

Marseilles to Nice and Genoa.

April 24th.

The road from Marseilles to Genoa, along the shore of the Mediterranean, and at the foot of the maritime Alps, is celebrated as one of the most varied and picturesque in the world. This is particularly true of the portion from Nice to Genoa, known as the Cornice or Riviera del Ponente. We had no hesitation in deciding to enter Italy by this road, rather than by the more frequented and expeditious route by steamer to Leghorn, or to some other Italian port, nor did we afterwards find occasion to regret the choice.

We left Marseilles at noon by diligence, arranged as before in the *Coupée intérieur*, for a ride of 123 miles, to Nice.

Had I begun the account of diligence travelling with the experience of to-day, I should have been less liberal of commendation; not that there was fault to be found with the carriage, which was altogether comfortable, but they gave us only half a team. We had now but three horses, placed abreast (one stage only excepted, in which we had four), instead of seven or eight, and consequently our progress was comparatively slow. But we travelled over a magnificent road, smooth

as a house floor, wide, and hard as marble; otherwise three horses could never have drawn the heavy diligence, with seventeen passengers and a vast pile of luggage on the top.

FACE OF THE COUNTRY.—We travelled forty or fifty miles through a ceaseless succession of mountains of limestone, until the shadows of night veiled them from our eyes. An ocean of dreary mountains met our view as we advanced, blinding the eyes with their glaring whiteness, treeless, and with hardly a shrub or a tuft of green grass; they were jagged, indented and conical, and ran along in mighty ridges, while in a perspective view, they appeared to enfilade and cross each other in every direction, with intersecting curves, so that we were amazed that one of the best roads in the world should have been constructed in a region where it seemed almost impossible to construct a road at all. It is often cut into the mountain side and built up by walls, from an abyss below; but all possibility of danger is prevented, by a guard wall running along the side of the precipice. Like all the French civil engineering and public works in stone, this road is so admirably constructed, that the example is worthy of all praise. As we travelled on, towards evening, the mountains receded further and further from each other, and the spaces, garnished with verdure, became both broader and more frequent, until fields and farm-houses began to appear, and every mile to become more and more numerous.

VILLAGES.—We passed several villages, and some that might be called towns. In general, the houses in the villages were crowded upon one street, so narrow, that it was with great difficulty that even a laden donkey could pass our carriage. Nothing can be more comfortless than the appearance of these rude villages; they are bounded by stone houses, in general rough and unsightly, and without any space between them and the street; children, shops, goods, donkeys and their carts, women with their knitting, the cobbler with his tools, all are consequently under the windows, at the doors, or in the rooms to which they lead; the whole family and their com-

fortless dens being exposed to view. Were it not that in the larger houses there is often an interior court, and decent upper rooms, we should think that there could be no comfort. Nothing, whether we regard beauty or accommodation, can be more strongly in contrast with our clean, spacious, airy, and bright villages in New England. Clouds and darkness, lightning and rain, were united during the night, to form a striking contrast with the beautiful night which attended us from Tonnere to Dijon.

We were constrained to descend from our diligence at nine o'clock in the evening, to receive our dinner at the village of Luc. The fare at the humble inn was ample, and was served with attention to our comfort. The brief stop of the diligence left no time for ceremony, and both our courier and the conducteur sat down at the table with us—much in the style of American simplicity in gone-by years. We were soon again on our way, without any incident, except stopping at some unknown village to change the horses, and I am assured that we lost nothing by the darkness of the night. The French diligences are so comfortable and the roads so good, that it was very practicable to obtain some repose during the night.

ENTRANCE OF THE MARITIME ALPS.—We perceived by the movement of the carriage, that the country was becoming more hilly, and as the morning was disclosed, we found that we were advancing on a winding road, passing among mountains and through deep gorges.

The white limestone hills had disappeared, and the spurs of the maritime Alps had taken their place (apparently primary rocks), while more distant and more elevated Alpine peaks came momentarily into view.

LORD BROUGHAM'S VILLA.—As we proceeded, the mountain scenery became more softened, grassy meadows and cultivated fields appeared, with accompanying farm houses, and then to our surprise we descried elegant mansions, ample, tasteful, and evidently fresh productions of skilful architectural design. They were surrounded by cultivated grounds, and embellished by gar-

dens, inclosed by excellent fences of iron or stone. In short, these establishments were so entirely at variance with every thing which we had seen since we left Marseilles, that we were at a loss to account for the sudden change, until we learned that the beautiful villa we saw, was built by Lord Brougham, in one of the most charming situations in the south of France, and called by him Louise Eleonore; and that Mr. Leader and other English visitors have houses here also.

VEGETATION OF A WARM CLIMATE.—Passing by these establishments on the slopes of the mountains looking towards the sea, we descended into a country having a climate adapted to the orange and the lemon, the fig, the almond and the olive, all of which were flourishing in the open air. The hard, laborious looking olive, which, at Nismes, was a mere bush, is here changed to a picturesque tree, much in form, size, and color of its foliage, like our silver-leaved willow. The roadside was bright with red poppies, pink gladiolus, blue flax, and several kinds of yellow and blue flowers which we did not know, and long hedge-rows of hawthorn or rose, seemed to convert the whole land into a flower-garden.

The trees in the orange and lemon groves were large and most beautiful, with their exuberance of golden and yellow fruit, and fragrant blossoms; while all around a rich and varied vegetation, with many horticultural and other rural productions, evinced a semi-tropical climate in a latitude corresponding to the southern parts of New Hampshire and Vermont. This appears the more extraordinary in a region lying at the foot of cold mountains, which, in parts not remote, are covered with eternal snow.

ENTRANCE INTO SARDINIA.—It was an auspicious take leave of *La Belle France*; for almost before we were aware of it, our coach came to a full stand at the river Var, which forms the boundary between France and Sardinia, the first kingdom of Italy which we were about to enter.

NAPOLEON'S COLUMN AT CANNE.—We must not, however, pass the boundary without recalling an interesting historical

association connected with this vicinity. At the village of Canne, where we descried again the blue Mediterranean, we were detained half an hour, to remove and cool an overheated axle of our carriage.

Just after we were again in progress, we passed a marble column, standing on the roadside. On this column we read—"Souvenir, Mar. 5, 1815."

At the village of St. Raphael, in this vicinity ($1\frac{1}{2}$ mile east of Canne), Napoleon landed from his exile in Elba. On the memorable day, whose date is inscribed on the monument, Napoleon appeared at the place where he had, the year before, embarked for his exile. He had with him 800 men, his followers; *i. e.* 500 grenadier guards, 200 dragoons and 100 lancers, without horses. He bivouacked the first night in an olive-garden at Grasse.

The events attending his perilous journey to Paris, and the memorable hundred days that followed, are now enrolled in history.

Entrance into Italy.

April 25th.

On the French bank of the Var, our passports were viséed by their custom-house officers, and we then passed the long bridge, beneath which the river, swollen and turbulent from recent rains in the Alps, rolled down its muddy flood. On the other side a Sardinian officer met us, and with much civility, went through the formalities of passports and baggage, examining only very slightly a single trunk of our numerous packages; or rather, he only opened the trunk and shut it again. Four francs that had been slipped by François into his hand, made every thing smooth with this polite official. A short time more placed us in the beautiful city of Nice; where we found very desirable apartments in the *Hôtel des Etrangeres*.

It was not without emotion, that we entered Italy. Italy

—so long admired—so long desired; and it was not with indifference that we looked back towards France, along the sparkling waves of the Mediterranean.

Nice.

This city is situated immediately upon the sea-shore, and contains about 30,000 inhabitants. The Italians call it Nizzia. The small river Poglione washes Nice on one side; it is at present, like the Var, swollen by Alpine rains, and rolls turbulently along its bed, full of rolled and rounded pebbles, and of shingle, smoothed by Alpine floods. The old town is filled with lofty houses, crowded and dirty, like others that we have seen. In our walks, we passed into several streets so very narrow, that there can be no domestic retirement; every thing is seen from the doors and windows on the opposite side, at the distance of three or four yards. These narrow lanes were swarming with people, who wear a very picturesque costume. We were amazed to see the manner in which the children are stowed away among baggage and other articles in the panniers of the donkeys, which are loaded to excess. The women, although somewhat more feminine than in other places in this region, are as coarse as the men. They invariably carry a distaff in their hands, spinning as they walk.

We visited some of the shops to see the articles that are here curiously wrought in wood; inlaid tables, trays, boxes, &c., are made of the varieties of wood grown in the country.

The new town is very beautiful. The houses are large, and have ample space before them.

There are several Boulevards or Promenades, wide, and shaded by fine trees; and that part of the city whose boundary is the sea-shore, is airy and picturesque; the sea-breeze is not obstructed by any intervening object, and the billows break incessantly upon the shore. The water is turbid for some distance from the land, owing to the mud brought down by the

rivers, and the clear blue waves of the Mediterranean form a strong contrast in a well defined line.

There is a fine row of houses along the river, on the west side, and the new terraces and square, as well as the most beautiful houses, have, without doubt, resulted from the popularity which the town has enjoyed, as an agreeable residence, and as a place favorable to the restoration of health. Like Genoa, it is a free port. It is liable to great heat and dust, and occasionally, chilly winds slide down from the cold snowy mountains. Its modern improved appearance has arisen from the great resort of British residents.

The painful result of many English experiments, in Nice, for the recovery of health, is but too evidently read in touching records on their monuments in their two cemeteries. Their reverence for the memory of the dead is accompanied by regard for the living, as appears by the chapels of the English church, which are to be found in most of the great cities on the Continent. One has been opened here by special permission from the Sardinian government.

The population of Nice is both Italian and French; the former prevail. At our table d'hôte, to-day, French was spoken, but the waiter who attended upon our party speaks very intelligible English. Indeed it is very common in Continental hotels and in cities, to which the English and Americans resort, to find the English language well spoken.

Nice has been the scene of sanguinary warfare. In 1543, it sustained successfully a protracted siege, which was waged against it by the unnatural combination of the French with the Turks; a disgraceful assault upon the cross, sustained by the crescent and cross united. The city was bravely defended by a Savoyard gentleman named Montfort, who stood a general assault, before retiring to the castle, in which the defence was sustained, so as to afford time for relief, by the approach of an army from Milan by land, and of a fleet, conducted by the Genoese Admiral, Doria, when the siege was raised.

The defence was much aided by Catherine Seguana, the

wife of a poor citizen. When the Janissaries had already planted the crescent upon the rampart of the outworks, and the troops were flying, she, with a hatchet, cut down the standard-bearer of the Moslem ensign of victory, rallied the fugitives, and expelled the enemy. A statue was erected to her memory, by her fellow-citizens, and it remains to this day to the honor of both. The inscription upon it is—

“*Nicæna Amazon irruentibus Turcis, occurrit, exemptoque vexillo, triumphum meruit,*” 1543.

The castle was blown up in 1706; the ruins have been recently removed, and the site converted into a walk, and planted with trees.

The environs of Nice are extremely beautiful and grand, from the combination of mountain and marine scenery. A perceptible change of climate is realized by ascending the hills in the vicinity, on which many desirable residences are established.

Nice to Genoa.

At Nice, François found a vetturine returning empty to Genoa, and made an advantageous arrangement with the man to take our whole party of eight persons for 300 francs, the coachman paying his own expenses. The carriage was a large landau, drawn by four horses, with a seat behind, and room for two with the coachman. The beauty of the Reveira road commences at Genoa, and we considered ourselves fortunate in securing an open carriage for the four days' ride before us, as we could now deliberately survey the magnificent scenery of which all the world has heard. At eight o'clock, A. M., we were on our way; having, at parting, received a cheerful “*bon voyage*” from the good hotel in which we had been lodged: the master and servants being assembled at the door, to witness our departure—and really their deportment was more like that of friends taking leave, than that of

mercenary people, who, having received our money, were willing to see us depart.

RETROSPECT OF NICE.—From our carriage we were still more strongly impressed with the beauty and attractions of Nice. Our way led, for several miles, up a road cut out of the side of a mountain, to the north and east of the city; it rose gently, but by an angle, which required us to walk the horses; and, as we were now elevated upon one side of the natural amphitheatre, which embosoms Nice, and were every moment rising higher and higher, we gained the most delightful views of a grand panorama, of which Nice was the centre. The Mediterranean was the southern boundary, with its interminable blue waves rolling onward to Algiers, and the wide extended African coast. Nice appeared a gem in the midst of a lovely valley; and innumerable country houses, in a style of tasteful architecture, dotted, not only the widespread circular plain, but rose through the olive groves upon the declivities of the hills and mountains on every side. It was indeed a splendid prospect, and it grew at every step still more impressive, as we slowly mounted higher and higher; while, on our right, the mountain ridge, out of which our road was excavated, formed a bold barrier at a great elevation.

ASCENT AND VIEW OF THE SNOWY ALPS.—Thus, upward we advanced, until the road began to turn towards the Mediterranean, when the Alpine peaks and ridges, covered with ice and snow, “the glorious, sun-lit, snowy mountains,” were seen to emerge above the horizon, far more grand than when we first descried them from Lyons and the Rhone. They were very distinct; vast domes and peaks, and long slopes, perfectly white, and brilliant in the reflected sun-light, were spread before us in immense masses, and seemed very near, while they may have been fifty miles or more from us. Behind us, and on our left, was the lovely valley we were leaving; before us were the eternal snows; and as we turned more to the right, the boundless Mediterranean again broke upon our view, presenting a splendid combination of the grand and the beautiful.

The Reveira Road, or The Cornice.

Who has not heard of this road, one of the wonders of the world? and who that has seen can adequately describe it? The Romans had a road along this mountain-bound shore. It bore the imperial name of the Aurelian Way; but it was a narrow pass, often overhanging the sea, so narrow as hardly to admit of the passage of a single horse. Now, by the energy of the French government, which began and finished about three-fifths of the enlarged road, followed by the persevering efforts of the Sardinian government, a broad and excellent carriage way has been completed in regions where, if we look to the right or the left, below or above, it seems impossible, for much of the way, to find a foothold. The maritime Alps rise to the height of several thousand feet, and descend often in nearly vertical precipices to the Mediterranean. In the sides of these mountains, the road is excavated by blasting the solid rocks. A mountain impends over your head, ragged, projecting, and menacing, perhaps from a thousand or two feet above, while down, perhaps another thousand feet, the Mediterranean in solemn grandeur dashes its ever restless waves against the base of the cliffs. Often a wall is built up from below, either solid or sustained on arches, to support the road; and you travel within a few feet or yards of a tremendous precipice, beyond the edge of which there is nothing between you and death. In general there is a parapet, but not always; and sometimes road materials or rubbish form an imperfect barrier. There is, however, no danger; and the traveller proceeds with full confidence, and is quite at ease to enjoy the magnificent scenery. I feel that it is impossible to convey in language any adequate idea of this conjunction of lofty and dreary mountains with the sea.

The mountains rise in terrific grandeur, dark, wild, barren, ragged, and impending, in beetling cliffs, indented with yawning chasms and deep gorges. You are suspended in mid-air,

between heaven, and earth, and ocean, and are equally impressed with the sublimity of nature and the power and daring of man.

Settlements and cultivation would hardly be expected among such scenes, and yet they are not entirely absent. The little seaport town of Villa Franca is situated at the foot of the mountains, and not far from Nice. The fortress of Esa stands on a rock, a refuge from the Corsairs, and near it are many remnants of the Aurelian Way. Turbia occurs further on, and is a considerable ruin, connected with an inhabited village. A trophy was erected here by Augustus to celebrate his victory over the Ligurians, and here was then the boundary between Italy and Gaul.

Here we were met by an officer of the prince of Monaco—"the smallest monarchy in the world." He allowed us to pass without any material delay. From our carriage we could see, far below us, perched on a rocky promontory, the little capital of this puny dominion. It is situated on a table rock by the shore, and has a neat and orderly appearance. It is stated to have the usual appendages of sovereignty, a palace adorned with pictures, a throne-room, guard-room, antechamber, &c., all neglected and in decay, as the prince resides at Paris. There is a little harbor, where we saw a square-rigged vessel, and some small craft at anchor.

SLIDE OF THE MOUNTAIN.—A geological occurrence of some interest has left its record at a place called Rocca Bruna, where the rock is pudding-stone or conglomerate. There has evidently been a great slide. Immense detached masses, some of them as large as common dwelling houses, thirty to forty feet in diameter, were lying on the declivity of the mountain, close to the road; and it is stated, that a castle and a small village have also subsided without having their position disturbed, where they still remain erect and uninjured. They are now standing on a mass of conglomerate, and the place, a large void, where it parted from the mountain above is obvious to the eye.

The general structure of the mountain, so far as we could

observe, was stratified tertiary limestone. The strata are usually very distinct, and lie in all positions of obliquity. Sometimes they were vertical, and even folded under, being curved and contorted, thus proving great disturbance.

At Mentone, a village of 4000 inhabitants, twenty-five miles from Nice, we took our *déjeuner à la fourchette*. While our repast was preparing, we ran down upon the sea-shore and wandered upon the smooth pebbly beach, always beautiful with the lifelike beating of the restless sea. As we entered the town the women were washing at the little streams flowing across the road, sitting in baskets, or spreading out their clothes to dry, laying stones upon the edges to keep them from being blown away.

HUSBANDRY.—As we advanced, we were much impressed by the skilful husbandry exhibited among these rude and barren mountains. They were extensively terraced, the terraces being supported by stone walls, at distances of two or three yards apart. Wherever a spadeful of earth could be found it was carefully preserved and cultivated; and irrigation was most faithfully performed. To that end, at frequent intervals, little stone basins for water are established, into which the mountain streams are conducted. We travelled, through the afternoon, among groves of oranges and lemons, which perfumed the air. The fruit was as abundant, and as freely used, as apples with us. The trees are now blossoming, and, at the same time, full of ripe fruit. The lemons are delicate; the acid is mild, and the rind is very agreeable and refreshing. These groves, extending sometimes over several acres, are splendid objects to the eye. Fig-trees are also very numerous; and the olive-trees are seen in vast orchards, overhanging the terraces. These trees here grow to a large size, and form almost impervious thickets.

POVERTY AND DEGRADATION.—Several little children to-day followed our carriage for miles begging, but more to pick up the ordure dropped by the horses, which was collected by them in baskets carried on their heads.

At Mentone, were young women of decent appearance, who bore upon their heads boxes of wet mortar, and an older woman, of athletic figure, was working up the mortar with a pole. In this country, burdens are very generally carried on the head, and often by females. Beds, cradles, washtubs, buckets or copper vessels full of water, and many other things, are borne along in this manner; and the bearers appear unconcerned, holding their arms pendent or akimbo, and looking carelessly around; but we have never seen them drop any thing, or observed the head to vibrate, or the foot to stumble.

We are much impressed by the great number of fine faces among the Ligurians. They appear also cheerful and are courteous in their manners.

We passed, this afternoon, the island called Marquerita, on which was confined the man with the iron mask.

VENTIMIGLIA came in our way. It is a considerable town, and has very strong fortifications with walls and gates. The main street is so winding and steep, that we left the carriage and walked down through its narrow defiles, bounded by lofty houses.

It is the *Albium Intermedium* of Roman antiquity, and is regarded as a barrier against French invasion. There is a large and strong fortress, upon the mountain above the town. To a common eye it would seem to be impregnable; but Ventimiglia has repeatedly changed masters, and in the middle ages, the possession of it was much contested by the vicinal powers.

In our abrupt descent from this acropolis, we passed on our right, a large convent, and extensive barracks occupied by Sardinian troops. From this mountain-town we passed over the river Roja, upon a very long bridge, and for ten or twelve miles travelled over a flat and fertile country, intermediate among the mountains, upon which were a number of old castles. Leaving the considerable village *Bordighiera*, we observed a new feature in the vegetation of the country.

PALM-TREES appeared and soon became very numerous; many of them were lofty, 30 to 40 feet high, and very beauti-

ful. The palm, anciently introduced from Palestine, has become naturalized here, and is in much request, for decorating the Catholic Churches. The palms give the scenery an oriental aspect. Many of them are swathed around, in order to improve the growth of the branches used in processions, which gives them a singular appearance.

It is the date-palm which flourishes here, and excellent dates were served to us at table.

The occurrence of the date-palm at this place, forms a singular anomaly in the geographical distribution of plants, as it is not found elsewhere in all Italy, and, with some slight exceptions on the island of Sicily, not again north of the African coast. The flora of this spot is equally tropical in other respects, a fact due, as has been suggested, to the peculiar conformation of the coast where the peninsula of Italy meets the mainland, forming an angle protected by the lofty maritime Alps from the north wind, and receiving as in an eddy the prevalent warm breezes from the African continent.

At evening, we arrived at ST. REMO, a town of 11,000 inhabitants, 40 miles from Nice, where we spent the night. This town is beautifully situated upon a bright sandy bay. It is a very compact and gloomy town, being built extensively upon arches of stone, crossing the very narrow streets and connecting the houses, so that they may be entered, from one to another, almost without going into the streets, thus blending the whole into one fortress, capable of the most effectual defence. The houses extend up the sides of the Apennines, generally upon terraces, and have beautiful gardens.

Opposite to our hotel was an immense palace of a nobleman, and from my lofty chamber window, I looked down, in the morning, upon an extensive plantation of oranges; an exuberant wilderness, decked with this splendid fruit. It looked far below me, like a green pavement set with orbs of gold. The tropical vegetation of the maritime Alps is here, in its greatest perfection, and, on leaving San Remo, we saw taller palms than we had seen before.

MOUNTAIN TORRENTS.—A serious inconvenience sometimes meets the traveller upon the Reveira road. Such torrents occasionally descend from the mountains, as to swell the rivulets so that they become impassable.

Arriving, to-day, at one of these places, a crafty Ligurian, after much gesticulation and vociferation with our coachman, persuaded us to descend from our carriage, pretending that it would be dangerous to pass the swollen ferry with such a load. He offered to ferry us over in a boat, and we embarked in his small craft; but on our approaching within about two rods of the opposite shore the boat grounded, and he carried us all ashore one, by one, upon his back. This was merely a piece of finesse to obtain two francs; for our carriage passed without difficulty, and might have taken us all over, as it did in a worse case yesterday.

April 27.—Our journey to-day was continued to ALASSIO, 35 miles. Upon the route there were many towns and villages, and others looked down upon us from the mountains. Numerous single houses were seen here and there, in elevated picturesque situations, and along the shore were many towers, erected in gone-by centuries as places of security for persons and property, from the plundering and bloody attacks of the Corsairs of Africa. As we drove through the narrow streets of several of these small towns, we could, with a cane, and sometimes with the hand, touch the walls on either side from the coach, which entirely filled the way.

The people seldom live on the first or ground floor; it is occupied for bakers' or grain shops, and for storage of wine-casks. Nothing about the houses looks comfortable; but, like the French, they may have interior courts and upper apartments that are agreeable. They seem very fond of putting flowers in their hats, and of growing them in jars upon the meanest window-sill.

To-day we made our noon halt and déjeuner à la fourchette at ONEGLIA, noted as the birth-place of the renowned Genoese Admiral, Andrea Doria.

GIGANTIC GEOLOGICAL SECTION.—Probably in few other

places can a more magnificent section of strata be found, than is presented by this road along the maritime Alps.

Almost every where the section has been carried through solid rocks—mountains several thousand feet in elevation, whose rough and almost vertical precipices are laved by the billows. In such situations a deep and wide section has been made with gunpowder, and a wide surface of fresh rock exposed.

There are many places where the long cylindrical holes bored to blast the rocks may be seen, 50 to 100 and 150, and even 200 feet above your head, and in some cases at still greater elevations.

It was our opinion, so far as a transient view enabled us to judge, that the mountains we had passed were in no case primary, but consisted of strata of limestone and sandstone, and dark slate, possibly limestone, possibly argillite, in different varieties.

The principal advantage to be derived from the inspection of this immense section, is in studying the phenomena of stratification, and the nature and energy of the forces that have disturbed and altered the original position of the strata. The aqueous origin of stratified rocks, as a general truth, is not doubted, nor, with few and limited exceptions, their original horizontal or nearly horizontal position. I am able to state that the strata of the maritime Alps are in every position, except the horizontal. There may be, in a few places, a deceptive appearance of horizontality, derived from the curve of a wide bend.

The trend also, or direction of the strata, varies very much, and the dip is sometimes reversed: if the strata have been dipping east, they may suddenly dip west, thus producing an anticlinal axis. At other times, like a trough, they are curved upward at both extremities.

Often they are also mixed and jostled together, in strange confusion; all order is destroyed, and broken strata are blended in confusion—as fragments of ice are piled up by a river flood,

and then fixed in their position by congelation. Near Alassio, this latter occurrence in the strata is very striking: for a long distance, and for a great height and depth, the strata are all in inconceivable confusion, distorted, curved at acute and obtuse angles, lapped over each other in fragments, reversed in position, the superior being below and the inferior above, and the great body of the mountain squeezed and broken, so as to produce a mass of ruins;—ruins not, however, separated, but remaining in juxtaposition, although not in any regular connection. Among the dark slates and limestones, there are also veins of magnesian carbonate of lime of a brilliant white, crossing the rocks—often in a perfect network, and occasionally parallel with the strata. On the sea-shore at MENTONE, we found dark slaty fragments full of quartz veins.

The phenomena which I have mentioned, as regards the position of the strata, afford unquestionable proof that these mountains have been powerfully upheaved; or, in part, upheaved, and also, in part, depressed. The nature of the power I have elsewhere discussed, and I shall not now enter upon any theoretical speculations.

A SARDINIAN INN.—We lodged in a house at Alassio, in which pomp and meanness were strangely blended.

The street where our carriage stopped at the door of the Hotel, was, by the measuring-tape, only ten feet wide. The interior and great court was dirty and had a very offensive odor, which pervaded the entire house. They said it was owing to beans, with which they feed their horses; but I discovered also another cause, not uncommon in continental houses, arising from inattention to cleanliness and decency. In a vast room above, almost as lofty and large as a church, a company of Ligurians were dining, and were very vociferous and noisy; their appearance was coarse, but they had a free bearing, corresponding with the comparative liberty of Sardinia.

A large interior room, in which we dined, was lighted only from contiguous rooms; it was 18 or 20 feet high, with vaulted

apartments, frescoed and gorgeously gilded, and the side walls also were panelled in fresco; but the floor was of cement without a carpet, and the doors were, in part, panelled and gilded, and, in part, they were in rough boards. Several pictures hung upon the walls of the house—some of them not bad. The windows and beds were curtained, and the chairs had green damask cushions. The people were very civil and kind, and the beds good, with iron bedsteads, but there was, in other respects, no snugness and neatness about the house, and its atmosphere was so bad that we found it hard to endure it even for a night.

The stairs in this hotel, as elsewhere, are of stone, and the railing iron, safe but cheerless and inelegant enough. The bread here, as generally in the south, has been black, coarse and ill-made, and butter worse—in this house very bad—white, fatty and rancid. In these countries of olive oil, they think but little of butter.

When we left the hotel, the family gave us the usual "bon voyage" uttered with a very kind expression of voice. We are happy to add that this is the worst Sardinian inn which we saw. It had been once a palace, and no place is more comfortless than a decayed and dilapidated palace.

As we drove out of the town, along the narrow and dirty streets—the lofty houses almost shutting out the light of the sun—the appearance was extremely comfortless; and as we looked from our carriage into the apartments, dark, gloomy and filthy, it seemed to us that the people must be wretched, but they are accommodated to their situation—

"See some strange comfort every state attend,
And pride still waits on all, a common friend."

There is no harbor of any importance between Nice and Savona. The fishermen's boats, and even larger craft, are seen drawn up on the beach high and dry, while square-rigged vessels may be observed riding at anchor a mile or two from the shore.

The Ligurians, from the most ancient times, have enjoyed

the reputation of being excellent sailors, and Columbus did no dishonor to the national character.

PROGRESS TOWARDS GENOA. *April 28.*—Rain detained us in the morning, and we did not leave Alassio until near eleven o'clock, when the bright shining of the sun gave us a cheerful departure. We had, indeed, feared that the heavy rains of the last night would render some of the mountain-torrents impassable, but we forded them all—only using a foot-bridge for our party at one place, in order to relieve the carriage of some weight. We saw, however, numbers of people carried over on the backs of Ligurians, as we were transported yesterday.

At ALBENZA, on an elegant superior bridge, we crossed the Centa, the only stream from the mountains which is permanent; on this occasion it was very much swollen, and so full of mud as to discolor the sea for a long distance from the shore.

Albenza has been a famous town, and the metropolis of a republic of the same name; it was so formidable in ancient times, that an alliance with it was courted by Carthage; but its population is now only 4000. Its walls and towers still remain, and have a venerable and formidable appearance. There are, in this vicinity, many Roman antiquities. One of them by which we passed is a stone bridge, rather narrow and not high: doubtless water once flowed beneath it. It now stands over dry ground.

Albenza was occupied by the French armies, in 1794, as a centre of operations, and again, in 1796, Napoleon made it his headquarters.

After leaving this place, we passed over a very luxuriant plain, several miles in extent—a country heretofore unhealthy from stagnant water, but of late years it has become more salubrious, in consequence of drainage.

At Finale, where we stopped to dine, in another decayed palace, we viewed the magnificent cathedral of St. John. It has been recently repaired, and was extremely rich in gilding, in marbles and in fresco painting, which represent portions of the history of St. John. Finale was once a very important

place; it was formerly ruled by its own marquis, but was, in 1314, conquered by Genoa. Towards the close of the fifteenth century it was acquired by Spain, and many strong works were erected upon the hills for its defence, where they still remain.

In the course of the afternoon's ride, our road led us through three short tunnels in the mountains. The mountain scenery of the road was, to-day, beyond description grand, and almost terrific. The road ran close to the brink of the precipices, and the heavy breakers roared at the foot; while the impending mountain, with its colossal masses, rose a thousand or two thousand feet above our heads, and its fractured fragments, fissured by blasts of gunpowder, hung over us, every moment menacing a fall.

As we wound around the projecting spur of the mountains, they presented aspects ever varying, but always grand and sublime. Mile after mile of such scenery kept our eyes constantly intent on this stupendous architecture, whose features changed every moment as we advanced; our feelings were those of intense and almost painful admiration.

Happily, anxiety for our safety was prevented by the parapet, which, in most of the critical places, was faithfully erected. A higher road across the mountains was pointed out to us, but it had been relinquished for the one upon which we now travelled, which had been constructed at a lower level, in consequence, as I suppose, of a fatal accident which happened seventeen years ago, upon the higher road.

We passed, this afternoon, a beautiful colored marble, which forms immense masses in the mountains, and is wrought for architectural purposes.

Many huge rocks had been detached from the cliffs and precipitated into the water, where they stood immovable, defying the impotent dashing of the billows.

As we approached Savona, we first descried primary slates, forming masses of mountain-rock, but broken up and intermingled in great confusion.

Sabon, or Sabona.

As we approached Savona, we penetrated the last jutting buttress of the mountains, by means of a tunnel, being the third promontory which we had passed in the same manner. The shore of the Mediterranean is here wrought into graceful curves, forming bays of great sweep, and bounded at the two ends by promontories—branches of the Alps, which protrude into the sea.

Near to Savona, and the still nearer town of Noli, we opened a splendid bay of great extent, and of a deeper curve than any which we had before observed. The last promontory that we passed broke the force of the Mediterranean waves, and still there was no secure harbor. Fishermen were engaged in managing their nets, made of dark-brown twine. Fortifications of great extent, and strong as stone walls and high position could make them, appeared upon our left, and gave intimation of the importance of Savona as the third city of maritime Sardinia: the order in which they are ranked being Genoa, Nice, Savona.

We entered Savona beneath and through a vast arch cut in the natural rock, whose lofty battlements formed a natural defence which art had improved into an acropolis.

By way of a contrast to that of Alassio, we found ourselves in the Hôtel la Porte or Hôtel Royale, at Savona, in a most desirable asylum. This hotel is a large house, standing in an open area, with free air and space around. Our parlor is in the third story, contiguous to the bed-rooms, and all of them have fine unobstructed views. A good dinner was provided for us at eight o'clock, and after the cloth was removed, we gathered around the table with our books and papers, having a home-feeling, such as we had not, for many hundred miles, before experienced. The house is thoroughly clean—no evil odors are abroad, and there are excellent baths.

This is not inappropriate to the town, where by common repute soap was first made, and which discovery is perpetuated in the name of the city.

PORT OF SAVONA.—Soon after our arrival, as evening was near, we issued at once from our hotel, and saw what was nearest and most accessible. We first resorted to the port, the only harbor which we have seen since we left Marseilles.

In 1528, by sinking hulks loaded with stones,* and since, by the progressive silting up with sand, the nefarious consummation of jealousy and selfishness has been wrought out. By great labor and expense, however, the passage has been so far cleared that ships of 200 tons can now enter the harbor; and a large machine, afloat, appears to be ready to effect a further improvement.

Here and about the quay we had the pleasure of seeing something of the stir and bustle of commerce, and a large number of vessels, several of them square-rigged.

COLUMBUS.—Much perplexity exists as to the real birthplace of Columbus. There is an ancient court here, near the harbor, called the Court of Columbus. His father's † house was pointed out to us, in which, it is said, he lived in childhood and youth—the very house in which the intelligent and far-seeing youth may, even then, have been maturing those studies which led to the discovery of a continent from which we, coming from among its citizens, have now arrived, and are examining with no small interest the city in which the great discoverer passed his early years. Savona is a beautiful town, with many fine buildings, and the environs are in a high degree picturesque, with terraced and cultivated hills.

We visited a cathedral of the age of Julius II., 1604, and saw his golden crosier, set with gems, and also an elaborately carved pulpit, made entirely of Carrara marble.

In this cathedral are many pictures and objects of curiosity, which twilight, already deepening its shadows, prevented us

* Done by the Genoese on purpose to destroy the harbor.

† Proved to have been his by certain public records in Savona.

from examining satisfactorily, although an ecclesiastic in attendance was obliging, and ready to exhibit the most interesting objects.

Savona to Genoa.

April 29.

Leaving Savona in the morning, we saw, at VORAGINE, ten vessels constructing on the stocks ; some just set up, and others ready to launch. They were from 50 to 150 tons, of an inelegant model.

In the village of Congoletto, our carriage was stopped a moment to enable us to read a Latin inscription painted upon a wall on the side of a house, and commemorating it as the birth-place of Christopher Columbus. The citizens of Genoa, however, discredit all traditions giving to any other than their own city the honor of his birth, where, it is asserted, title-deeds exist showing it to have been the residence of his father, Domini-co. It is certain that the family still exists in Oneglia, Savona, and their vicinity. The question is as little likely to be settled as that of the birth-place of Homer.

At VOLTRE, a town of 8000 inhabitants, we dined in a very indifferent hotel, and, as usual, employed ourselves meanwhile in a visit to the cathedral, which we found adorned much as such provincial places usually are. Certainly it was not worthy of particular comment.

At this place we saw still larger vessels on the stocks than those we have seen at Voragine. They were raised on very high ways, so that the stern of one projected over the street through which we drove. About 100 women were gathered by a stream of water, busily engaged in washing clothes. They work on their knees, rubbing with their hands, and using soap ; but it is said that they do not iron the clothes. Every where in Sardinia we have seen this mode of washing.

In Paris and in Lyons there are floating wash-houses, in which the women stand and wash in the river. The linen that

we have had washed in the hotels, has been returned in the best order, and very white.

The ride this morning was delightful, and we had a fine azure, Italian sky. The road was not so bold as it had been in the preceding stages of our journey. A few abrupt places occurred, but, in general, the scenery was of a milder character; and the country was in high cultivation, and very beautiful. The road ran usually upon the very brink of a precipice, but a good parapet rendered it safe; and the billows of the Mediterranean, agitated by the winds of two or three days, roared and foamed, and dashed high their spray against the rocky barrier. In the afternoon the wind was so strong, and raised so much dust, and was withal so cold, that we were constrained to close the carriage, and therefore I could only observe that we passed through several towns, one of them large; and the establishments, both in the villages and the rural abodes, often indicated wealth and taste. As we came within a few miles of Genoa, and particularly after we arrived in the suburb Petro d'Arena, vehicles, especially carts, became very numerous, and the city rose distinctly into view, lying chiefly on the north side of the harbor. In entering it we passed two gates, an outer and an inner, at both of which there were sentinels. Our passport was taken by a military officer, and we were allowed to proceed at once to the Hôtel d'Italie, near the custom-house, where we were elegantly accommodated in large and fine apartments.

BEGGARS.—Throughout our journey in the southern part of Europe we have found beggars in greater or less numbers, many in southern France, and in Sardinia they have been innumerable. Wherever we stop or move, we are followed by throngs of those poor creatures; and sometimes the children will run a mile or more for a sous, or for nothing, as we do not always give to them; more frequently we give them bread rather than money; and sometimes we take it along on purpose. It is always eagerly seized, both by adults and by children; and the little hungry urchins will rush in such a crowd after a loaf, that they

tumble over each other in the scramble. In all the villages there are many idle people, sitting and lounging about the houses and streets, apparently without employment.

GEOLGY.—Soon after leaving Savona, primary slates, micaceous, talcose, chloritic, and perhaps argillite, made their appearance; but it was not always easy to distinguish the varieties. After a few miles, and for many miles, came pudding-stone and conglomerate. The pebbles were rounded, proving long attrition in water; and some were very large, even a yard in diameter. This rock rose to the height of several hundred feet, hanging over our heads, and some of its loosely cohering masses seemed ready to fall. There had been also great avalanches from this rock, as was proved by numerous and large masses that were lying in the sea, and all along the shores, while the fractures above, and the projecting and apparently unsupported masses, threatened a catastrophe; we were glad when our wheels rolled us onward beyond the danger of a downfall. In the midst of this generally coarse conglomerate there were beds of fine arenaceous rock, whose edges appeared water-worn, as if the strata had formed part of a sea-coast; nor could we doubt that the entire formation was accumulated in the condition of ruins, which being worn, and rounded, and cemented beneath the sea, had been gradually elevated, and formed for a long time a boundary against which the billows chafed and broke, gradually wearing it into curved lines, as they are now doing upon the rocks below, that form the present sea-coast at this place.

The pudding-stone and conglomerate of the mountains was succeeded by serpentine of very beautiful colors; and this rock prevailed for many miles. Then again came primary slates, which, if our eyes did not deceive us, were continued to Genoa; for the dust blowing violently along in clouds, rendered our vision indistinct and uncertain. Through all the varieties of rocks, the same variations of position that have been described were renewed. We observed every situation of the strata between the horizontal and the vertical; and there

were all modes and degrees of intermingling, as if by violence.

The rounded stones washed out of the prevailing conglomerate, being laid up with cement, and usually covered with concrete, are used to form walls for fences and houses. We have rarely seen hewn stone structures in this region.

Genoa.

Two busy days in this ancient city have enabled us to obtain a general idea of it without entering into full details. Genoa is encircled by an amphitheatre of high hills, at the foot of which the city lies in the form of a bow. It is very compact, in diameter about two miles. Its fine harbor opens to the south and east, and the vessels are protected by two moles. The most ancient of the moles was begun in 1283, and finished in 1583. The second mole was constructed in 1683, and a tall light-house in 1818.

These structures are proofs how early the interests of commerce were cherished in this city, which, with its rivals, Venice and Pisa, engrossed for centuries the commerce of the Mediterranean as well as of the East, and, to a great extent, that of Europe. During 1000 years Genoa has been conspicuous in the annals of commerce; and although it has lost its individuality as a distinct and independent state, being now united to Sardinia, it is still an active and opulent commercial city. Its population does not exceed 120,000, or 150,000 in the city proper, exclusive of the suburbs.

From the water, the appearance of Genoa is very beautiful. Seen from that position, the city, and its hills and fortresses, form a perfect and splendid panorama; when viewed from the mouth of the moles, it appears a complete circle, of which every part is distinctly seen. Genoa is surrounded by walls and very strong fortifications, most of which being situated on the crests and peaks of the high hills which environ the city, command

it and the harbor effectually, and are equally efficient against an army approaching by land.

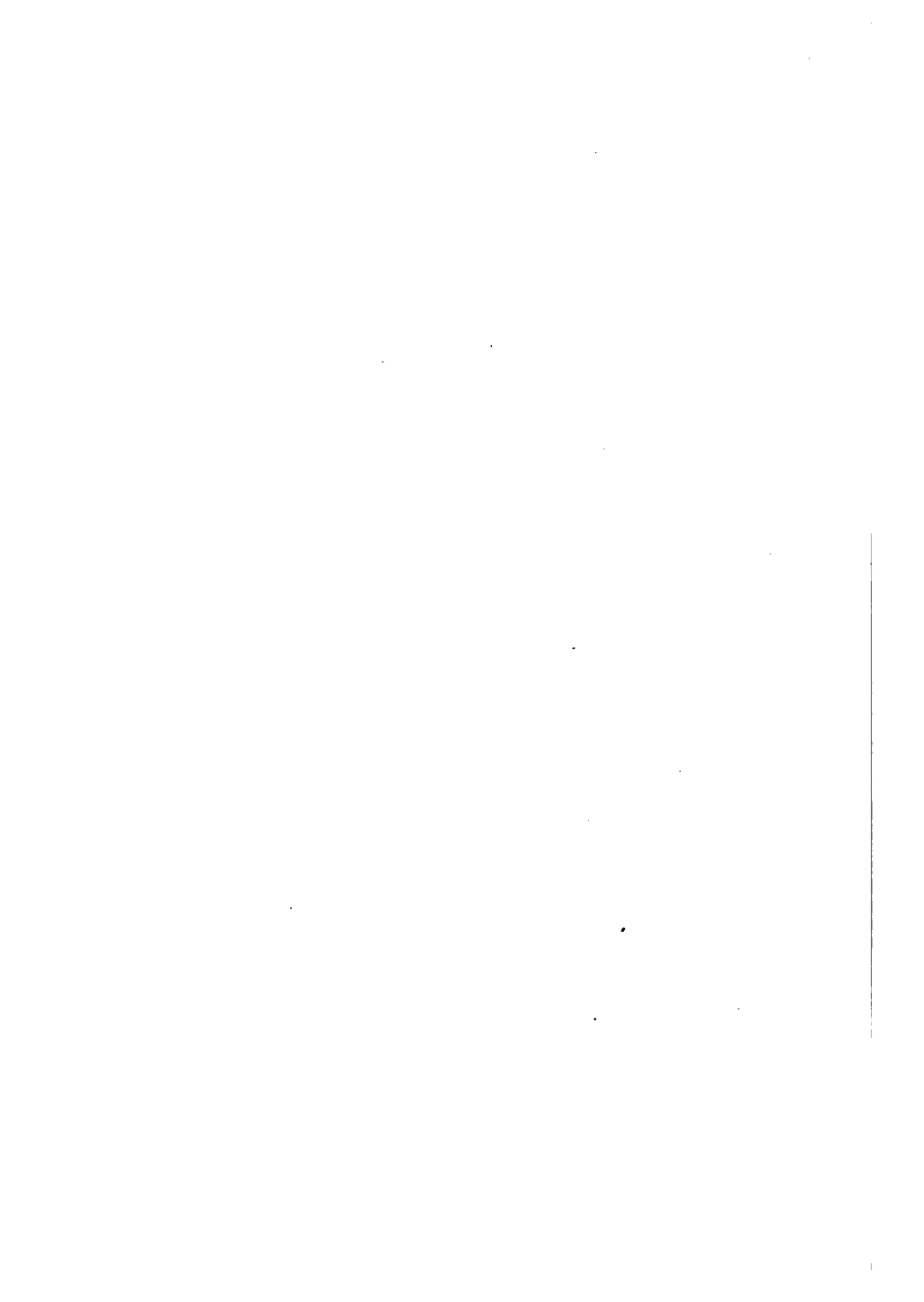
Its early history, like that of most of the cities of the old world, is obscure; but its high antiquity is proved by the fact, that it was plundered and burned by the Carthaginians 221 years before our era, and the plunder they deposited at Savona. The Roman Senate sent Lucretius Spurius to rebuild Genoa, when it became a Roman territory, as is proved by a bronze tablet discovered in 1506, which contains a decision made 187 years before the Christian era, by the magistrates of Rome, upon a question of territorial limits, between the Genoese and the inhabitants of Langasco and Voltaggio. A literal copy, in full, of this remarkable document, is given in the little volume—*The Guide to Genoa*—which is considered to be correct by our excellent vice-consul, Martin Moro, Esq., a native citizen of Genoa, to whom we have been indebted for much kindness. The document above quoted shows that the question at issue had been very carefully considered, as the boundaries of the territory are described in it with great minuteness. The history of Genoa is very interesting. It engaged in many wars, chiefly on account of its commerce, and sustained severe conflicts with the Turks, the Venetians, the Pisans, the French and the Austrians. It has been swept by the late popular wave which has deluged Europe, and its streets and palaces bear testimony to the fierce conflict.

MONUMENT TO COLUMBUS.—At last Genoa is about to do honor to the memory of her great navigator and discoverer, by erecting a monument worthy of her magnificence, and of his merits and achievements.

This monument is in progress, and although it is secluded from public view by a temporary inclosure, we were permitted to see it. The pedestal only is erected, and the panels which are to cover it—two of which we saw—are noble specimens of modern bas-reliefs. The work has been intrusted to a Genoese, a pupil of Canova. The figures upon the panels are nearly the size of life, and the scenes are, of course, selected from the great



Statue of Columbus, Genoa.



events in the history of Columbus. That which commemorates his ignominious arrest in Cuba, preparatory to his trial in Spain upon the charge of treason, struck us as one of the happiest efforts of modern art. Columbus is the centre figure, with a chain depending from both arms, and with a mingled expression of anguish and indignation, while a rough soldier grasps his collar. On one side stands the magistrate in the pomp of power, with hard and imperious features, waiting impatiently for his prisoner. In front of this magistrate is an Indian woman, with a countenance most expressive of hopeless sorrow; she holds by the hand her child, his arrow in his hand, and a determination in his eye, that gives token of no goodwill to the magistrate. The old Indian's quiet, deep melancholy contrasts wonderfully with the face of the indignant boy, and with the mortification of Columbus. The figure of a half-seated boatman, whose hand holds the rope, is wonderfully well executed. In all, there are 13 figures, almost two-thirds the size of life. The other bas-relief which we saw, shows Columbus the centre of a group of priests and others, explaining with a globe and pair of dividers, his views of the world. The angles of the pedestal are to be sustained by four allegorical figures of colossal size, one of which was partially exposed when we were there. Four smaller historical panels surmount the main base, and above this, upon a column, will stand a colossal statue of the great discoverer. When all the parts are brought into due connection and arrangement, this monument will be one of the noblest of historical records ever sculptured in marble; a monument which will be an honor to Genoa and a reproach to Spain, for the ignominious infliction of chains and a dungeon, upon one who had opened to her a new world.

STREETS.—All the world has heard of the narrow streets and lofty houses of Genoa, so near each other, that in most of them two men holding hands and stretching their arms across, would reach from side to side. This appears the more striking in those streets in which very lofty houses (usually seven stories high), often too of great magnificence, rise on both sides, and

with their wide projecting and highly embellished cornices, approximate so near, that one on the ground looks up at the heavens, as it were, through some deep fissure in the earth. The streets on which these splendid houses stand are, however, tolerably clean, and do not offend, like most other narrow lanes, by putrid exhalations.

A stranger who should leave Genoa without visiting its beautiful park, would fail of a high gratification. It is on the northeast, and occupies the highest ground in the city. The area is ample, and it is laid out in elegant walks, adorned with avenues of horse chestnuts, now in full bloom, and reminded us of home. We rode there this morning, making the circuit of the city, through the "Strada Nuovo," the widest street in Genoa. Our immediate boundary was the city wall, which here rises not far indeed above the area on which we rode; but the wall on the outside sinks far down into a very deep and splendid valley, which again slopes gently up to the top of the environing hills and triple fortification walls, and is every where diversified by villas and rural palaces, and the ample structures of several benevolent institutions. The house where Lord Byron lived when in Genoa was pointed out to us. On another side of the prospect was the Mediterranean, serene, and to the eye boundless. Near at hand, there were groups of young soldiers, some without arms, engaged in gymnastic exercises, while others down in the valley were at drill, or firing at the target. We are told that there are now 10,000 soldiers in this city. Like those of France, they are young men, but generally much better-looking men than the French soldiers.

ARCHITECTURE.—"Genoa the Superb" has often been called the city of palaces, and it is no exaggeration to use this language. The most splendid belong to the 14th and 15th centuries, when the commerce and power of Genoa were at their height. Their fronts, even on those narrow streets, are decorated with a profusion of ornaments, both in architectural embellishments and in statuary. Occasionally, also, the outside of the building is adorned with fresco paintings, which at first

strike an observer as being in bad taste, as they are exposed to the weather. The Palace Brignole Sâle is painted of a fierce red. This outside ornamental painting answers much better in this mild climate than it would in ours; but even here heat and moisture gradually do their work, and the pictures, often originally beautiful, both in design and execution, gradually fade. We had observed houses ornamented in this manner, for several miles along the road before we arrived at Genoa. We have seen the apartments of several of the Genoese palaces, and have been held in amazement while contemplating their gorgeous magnificence. My limits, both of time and space, prevent me from entering into minute details. Suffice it to say, that these palaces of nobles and of princely merchants are highly illustrative of the splendor of an age when wealth was poured into Genoa in full-flowing rivers, and when her merchants were princes and held rank among the honorable of the earth. Then too, painting, both in oil and fresco, had attained perfection. If it has not since declined, it has not advanced, and Italy, although so often laid under contribution to furnish art for foreign lands, still contains more and better examples in all its departments than any other country. The frescoes with which Italy abounds are among the most astonishing productions of the art. They cannot be removed, or only with such difficulty that it is rarely attempted, and hence have remained while empires have decayed. The name fresco conveys an allusion to their origin, as they are incorporated with the lime wall when it is fresh, ingrained rather than superficially applied. The finest specimens of the art are usually seen in the dome, or ceiling, or roof, where their effect is that of intense beauty.

CHURCHES. — Genoa contains noble examples of ornate church architecture, although this remark is certainly more true of the interior than of the exterior of most of them. We have visited several, and find them gorgeous in gold and frescoes, magnificent in proportions, and embellished with all that is most rare or costly in marble statuary and precious stones.

The floors are generally of tessellated marbles of different

colors curiously inlaid, of mosaic, or sometimes of *scagliola* in imitation of mosaic. *Scagliola* is a very frequent material for floors in Italy; it is made by inserting fragments of variously colored marbles, or of other stones, in a cement which sets hard and can then be polished. Such floors, when carefully made, are often exceedingly beautiful, expressing designs with all the accuracy and brilliancy of a mosaic pavement.

"St. Ambrose" is a church built entirely by the family Palavicini, and is a fine example of the most costly and highly decorated of Genoese churches. The whole interior surface is incrustated with costly and various colored marbles, twisted columns of oriental alabaster, and broad plates of the same decorate the high altar and chapels, while lapis-lazuli, jasper, and other hard and costly stones are reserved to enrich the surface of the private altars.

Frescoes of the most exquisite beauty cover the domes and vaulted roofs through the entire ceiling, which is subdivided by gilded mouldings into compartments for the pictures. These are often by the first masters of their time, and it is worthy of remark that Genoa possessed a school of art of her own, and boasts many artists of sterling merit, whose names and works are not to be found elsewhere. Thus Strozzi, the Genoese Capuchin, must be studied either in Genoa or in Venice, and Giulio Romano has left some of his best touches upon the Genoese ceilings.

In the chapels, besides massive candelabra and ornamental work in silver, we find statues and bas-reliefs, either sepulchral or votive, and numerous easel pictures of high merit. Our taste is, however, constantly offended by the silver stars stuck upon the surface of some fine Mother and Son to form a glory about the head of the Virgin; or, what is still more disgusting, and even melancholy, at the doll-like images of the Mother and Son, in a glass case, formed of wax, and adorned with all the tinsel and lace of a child's toy. Aside from these offences against good taste, the interior of these churches presents a blaze of glory, as far as it can radiate from artistic productions of the skill of man

and from the richest treasures of nature. It is overpowering to the mind to contemplate the multitude of objects to be admired, crowding upon the senses with a rapidity almost fatal to a distinct impression of each.

Our attention was attracted by several twisted columns of concretionary marble, resembling in the mode of disposition of their laminae, the huge stalactites sometimes seen in natural caverns, and doubtless formed by a similar process. We afterwards found that this was a favorite form in Italy for the columns of altars, and when, subsequently, we were at Tivoli, we had occasion to observe immense beds of marble of this sort, forming the basis over which that cataract leaps.

There is a striking contrast between the exterior and interior of these edifices. Some are as rude on the outside as if the masons had taken down their scaffolding but yesterday, the rough stones or bricks, with joints unfilled, and the holes for the cross timbers, and the supports of the scaffold still open. Others have an ornamental portal, and the front may be crowded with statues, and the remainder left unfinished, perhaps, from caprice, or death, or poverty of the individual builder; or, the vicissitudes of war or politics prevented their completion. The cathedral is finished externally, but in a very singular taste. It is covered outside and inside with alternate layers of black and white marble. This striped and checkered surface diminishes the dignity of this splendid edifice, and produces a bizarre effect unworthy of high art. Numerous examples of this sort of building are seen in Sardinia, Lombardy and Tuscany, and may be regarded as indicating a false taste accompanying the decline of art in the seventeenth century.

PALAVICINI SUBURBAN VILLA. *May 2, 1851.*—This villa is at the distance of 8 or 9 miles from Genoa. It is not accessible, like the palaces in town, simply by application at the door: a special permit from the marquis or his agent being necessary, and this was obtained for us by the intervention of our kind host. Our ride, on a fine day, with a genial temperature, gave us an opportunity to see the environs of this most pictu-

resque city—an opportunity nearly lost on the day of our arrival, owing to the clouds of dust borne along on a chilling wind.

The taste for building palaces, and the means necessary to this end, are still in flourishing existence in a city which, notwithstanding the severe vicissitudes of war and revolution, continues to be prosperous and opulent.

Some of the richest Genoese have two or three palaces, both in town and country; but they are occasionally abandoned, and suffered to pass into other hands. Mr. Moro assures us that we were correct in believing that the inns in which we lodged and lunched at Alasio and Finale had been palaces of noblemen. A palace which had cost three hundred thousand dollars was lately sold for fifty thousand; and fine palaces are oftentimes rented at a similar sacrifice.

In walking the streets of Genoa, and in viewing the surrounding country, and even in the villages and towns along the shore of the Mediterranean, as far as Ventimiglia, which was the limit of Genoese dominion on the south and west, one sees a great number of grand edifices, often fallen into decay, which he will hazard little in believing to be, or to have been, palaces.

Our permit admitted us at once through a very high and strong gateway of iron, within the ample domains of the Marquis of Palavicini. Our access to the house was by a gravelled coachway, between lovely hedges of Chinese roses on either side, entirely covering the stone walls with many-shaded wreaths of blooms, forming a most beautiful ascending avenue for 200 to 250 yards. The establishment was on one of the hills that spring out of the lower Apennines or Alps, for it is not exactly agreed where is the dividing line between these mountain ranges. The palace, a very spacious and lofty square building of white marble, stands on the declivity of a small mountain, which, to the eye, appears to be entirely covered by a dense forest in the most vigorous state of vegetation, and of an intense green, relieved by flowering shrubs and trees. We merely passed through the large hall of the house. It is not possible that they could show any thing here in art superior to the city palace

of the same nobleman, which, with all its rich treasures, we had seen. The steps, the halls, and a large elevated terrace, surrounded by a massy and elaborate balustrade, were all of marble—white for the interior of the house, and tessellated with white and dove-colored marble for the terrace.

A guide from the palace conducted us through three or four miles of wandering in this enchanting if not enchanted rural retreat.

The objects are numerous and various, and are arranged with such masterly taste and skill that the visitor is often taken by surprise as one new discovery succeeds another. It took our party three hours to go through these grounds—hours most agreeably occupied in each alluring place.

In our first walk along an avenue bordered by flowering shrubs and trees, we descried at a distance a beautiful although small marble temple. The following inscription informed us of the occasion of its erection :

Quod VIII Kal Decr. An. 1841
Maria Theresa FA cum Ferd: Gennatium Duce
et Eugenio principe Caviniani AA Gentili
Pelianum Hoc Rus et Ædes B Eavit
Ignatius Alexander Pallavicinus
Voti Compos Perenuabit.

The whole design is chaste and beautiful, and the angles are decorated each with a draped female figure. These statues are by Canova, and they exhibit woman in her loveliest and most attractive form. All that belongs to grace and symmetry of person, and beauty of features, blended with elevated mental and moral expression ; all are combined to make these female forms the beau-ideal of lovely woman. This temple was frescoed in Pompeian style. In the corners were large Etruscan vases, and on the table a beautiful set of cups of the same style.

Next beyond the temple was another marble structure—an arch of beautiful proportions, decorated with sculpture. The

following inscription upon it will gratify every religious mind, by the elevated thought with which it terminates :

Vateri Urbani labores—Valete procul animi
Impedimenta—Me Supera convexa Sylva et fonteis
et quid-quid est altiora loquentis naturæ
Evehat ad Deum.

Next to the arch is a rustic cottage, the back of which is blended with the rough back of the arch.

We wound our way onward through a gravelled avenue, surrounded by flowering native shrubs and trees, until we came to a rude and deep quarry, which had been cloven down from the top of the mountain, and was just such a disclosure of the structure of the interior as a geologist would wish to see. The rock was slate, chiefly micaceous, and the strata were nearly vertical. From this quarry we looked down the side of the mountain, into a deep valley, through which ran a small river ; and there were people on its banks, who were busy in bleaching clothes and in washing apparel. On the level floor of the quarry was a revolving circus for the children, with mimic horses at the ends of long arms, set in motion by hidden machinery below. On the higher parts of the mountain we found rustic bowers, with tables and chairs, which invited us to a short rest. I must not forget that, as we ascended, we stepped aside to inspect a beautiful picture of a Madonna in a secluded shrine ; for in a Catholic establishment she is never forgotten. On the very crown of the mountain is a small castle, built in strict imitation of the castles of the dark ages. It appeared to be about eighty feet high, and twenty-five-wide at its base, and is constructed of bricks and stone. It is furnished with a moat, and drawbridge, and battlements, and ancient armor. There are also ruins of fallen walls, which lie about as if accidentally. Within the tower there are beautifully finished rooms—two tiny tea-rooms and a dressing-room, and also a real effective kitchen, with all necessary appliances for a repast or a picnic. The upper story of the tower, in a room most beautifully free-

coed in the ceiling with blue and gold, is furnished with colored glass of many tints. We ascended by an external staircase of iron, quite to the top of the tower, and there we enjoyed a glorious panoramic view of this noble and fertile region. Genoa in the distance, with its circlet of fortified hills and mountains, and the blue Mediterranean, classical by every association with the most brilliant achievements, the highest mental attainments, and the most flagrant crimes. Doubtless, it was from military associations that the Marquis (who is really a duke—a title which he modestly declines assuming) was led to construct a sepulchral monument in the wood, to a supposed general, not far from the tower, and in a place where the tomb is distinctly in view, through a natural vista. To favor the illusion still more, a broken statue lies hard by on the ground.

In our progress we met with fountains, and cataracts, and elegant bowers, each beautiful thing taking us by surprise; and real birds singing in the branches, informed us that these harmless and elegant creatures are here protected, and find a safe retreat. We saw also a large marble basin full of water, while in it were innumerable gold-fish in the highest enjoyment of their pure crystal fountain, whose water was constantly renewed by a jet from a higher source, rising through the centre of the basin to the height of twenty feet, when its pellucid drops fall back in brilliant gems. Our greatest surprise, however, arose from another discovery. In the midst of natural rocks, we entered an opening—a gallery like the adit to a mine. The floor was dry, and the gallery was winding, until it became dark; but a little groping brought us to light, which streamed in, as in a mine, from a pit opening to the day. Onward we went, until we caught a glimpse of a cavern in half light; and soon our meanderings brought us to it; and there was a vaulted and fretted roof, and a succession of roofs, all rich in stalactites and calcareous drapery. A few colossal stalactites had been brought from some other places to enrich this natural cavern; but it had ornaments of its own that were not borrowed; and there were stalagnites sawn off for seats. In a natural basin in

its floor there was a crystal lake of deep water, and there a clean and picturesque boat invited our party to embark. Thinking that this overture had no other object than to ferry us across this miniature mountain lake, we were not a little astonished and delighted to find that our boatman navigated through various dark chambers and recesses in the cavern which were before unseen by us; and then we rowed into broad daylight, as the lake was extended a good way into the open area. Around the lake were pagodas and other Oriental structures, and an Egyptian obelisk at one end. There were also bridges over the lake, and over running streams. Marble statues, allegorical of Spring with its flowers, and of Autumn with its fruits, were there, and a marble sylph with wings. Arbors also, and a summer-house of wire, covered with roses, and one of the arbors was made up of vines and flowers, leaving verdant avenues of access, and crowned with a floral dome—a rural temple of Flora, under which were seats, inviting us to linger, to which indulgence, in so beautiful a place, we were not averse. But we had hardly taken our places, before a delicate spray descended in showers upon our heads; and when, supposing it to be rain, we promptly retired from the open bower to seek shelter, instantly more copious jets followed us with their liquid aspersions; and as we quickened our pace down the slope, much amused with our unexpected shower-bath, again jets d'eau darted forth in our faces, seeming to spring out of the ground, and to rain down from the branches of the trees.

In great hilarity we retreated, and learned that these lively jets, fed by a fountain on higher ground, and regulated by keys, were introduced for the purpose of watering the flowers and shrubbery, rather than for a display of water-works, and for the amusement of visitors; although it is to be presumed that this circumstance was not forgotten. Our conductor, who belonged to the household of the marquis, was as much amused as ourselves, and laughed heartily at our surprise;—and an

Italian laugh being very much like one in English, the sympathy of good humor pervaded the whole party.

Among the great variety of trees upon this place, evergreens prevailed. We found several American trees and plants which had been naturalized; among them were the magnolia grandiflora, and other magnolias. The cork tree, a fine specimen, and a vigorous camphor tree, also attracted our attention.

The taste and talent displayed in garden architecture by the genius who planned and executed this fairy labyrinth of beauty, and the wealth and liberality of the proprietor, combine, with the utmost advantages of climate and situation, to make this one of the most perfect country-seats imaginable.

After wandering over these grounds for hours, we were never able to anticipate any thing. So completely hidden are all these various beauties, that, from the highest point of view, you can more easily know what is going on in Genoa than in these grounds. Before leaving this delightful retreat, I must mention, that among its beautiful things is a classical monument in Carrara marble, to the memory of the distinguished poet of Savona, CHIABRERA, who flourished in the seventeenth century; and the opinion entertained of him by the Marquis of Palavicini is elegantly expressed in the following inscription:

Gab. Chiabrera
Anacreonta & Pindarum
Feliciter ausus.

The opportunity which we had enjoyed to see the rural palace, was, in a degree, accidental. The evening before, we had embarked for Leghorn in the little French Steamer Bosphore. The ship's boat took us out from the quay in a storm of wind and rain—and what with the agitation of the waves and the unsailor-like management of the seamen, we had no small difficulty in getting on board, the long-boat leaped so violently, as we stepped upon the side of the steamer, which lay at anchor in the basin. The wind was strong from the south, and after an attempt to pass beyond the moles, the Captain

cast anchor, and we remained on board for the night. Not having a full complement of passengers, he waited another day, and this gave us time for our excursion.

REFINING OF WINE IN HOGSKINS.—In returning to the city, we again observed a practice which is common in this part of Europe. The wines of the country are inclosed in hogskins, all the apertures being duly secured: they are filled quite full of wine, and are hung out in great numbers on the sunny fronts of the houses and shops, to ripen the wine; the bristles are sometimes on the inside. However revolting this may seem to us in America, it appears to be only an Oriental custom extended into Europe; such practices are often alluded to in the Scriptures, and are still observed in the East by modern oriental travellers.*

Genoa, as already remarked, has experienced the severity of war in repeated assaults by land and sea. It was originally surrounded by a Roman wall. In 1155, the Genoese raised another wall, to resist the impending attack of the German Barbarian, Frederick Barbarossa. Some of the gates are yet standing. Above the Porta Vacca, or Cow Gate, hung some of the huge links of the iron chain that closed the fort of Pisa, which were carried off by the Genoese, as a trophy of their great naval victory over the Pisans. Another circuitous wall was begun in 1327, and finished in 1537. It was from the top of the platform on these ramparts, that we enjoyed such delightful views. A third circuit runs along upon the tops of the hills, which command the town. This line was begun in 1630, and finished in 1638.

These lines, which form a vast semicircle, are supported by numerous forts and outworks, crowning hill after hill in a circuit of seven miles, the most extensive town fortification in

* Chemists know that weak alcohol suspended in a bladder grows stronger, by the evaporation of the water on the surface of the membrane—the alcohol not escaping. Such is, no doubt, measurably the effect of exposing wine in hogskins—and is, probably, what is meant by ripening.

Europe, except that around Paris. These fortifications were erected chiefly by the voluntary labors and contributions of the citizens. More than 10,000 of the inhabitants gave their gratuitous labors.

Among the sieges which Genoa has sustained, we can mention only the defence, in 1800, against the Austrians by land, and the English by sea, by the French General, Massena; it was within the walls that have been described. Massena surrendered June 5th, 1800, after a blockade of 60 days, during which, both the soldiers and the inhabitants suffered incredible hardships, especially from famine. Of Massena's army of 7000 men, only 2000 were fit for duty when they surrendered. The number of the inhabitants who died of famine and its consequent diseases, was above 15,000.

Among the dilapidated palaces of Genoa, no one appeared to us in such painful association, or rather contrast of present ruin with ancient splendor, as that of the great admiral *Doria*. Very near to it, and across the street, there is a vast ruin of a fortress which was demolished in the revolution of 1848. The Doria palace is all lacerated by innumerable balls, which struck against its sides. This palace was called Palazzo Fregoso, and was given to the celebrated Andrea Doria, who flourished in the age of Charles V., more than 300 years ago. The palace was, in a great measure, rebuilt by him.

The storming of Rome by the Imperialists, in 1527, drove from that city a renowned artist, Perino de Vaga, who was received by Doria, and employed in decorating his palace, in which he wished to reproduce the glories lately given to Rome by Raphael and Gulio Romano. In this now dilapidated and neglected palace, there is glory enough in the arts to arrest the attention of the present generation.

With no small emotion, we walked through its now silent and neglected halls—despoiled of their furniture, but still rich in frescoes, many of which, in the interior, are uninjured, and are exquisitely beautiful, while the portraits in the gallery are much defaced.

There were, in the 14th century, four admirals of the name of Doria, who were distinguished; but the most celebrated member of the family was Andrea Doria, the proprietor of this palace. He was born at Oneglia in 1468. He gained great renown by his successful efforts against the pirates and Corsicans. In 1524, he quitted the service of Francis I., who had made him admiral of the French galleys, passed over to the Hispano-Austrian party, and delivered his country from the dominion of the French; who, being in possession of Genoa, in 1528, Doria took them by surprise and drove them out of the city without bloodshed. Although, under a constitution which he formed or improved, he had been elected Doge for life, he again entered the naval service of Charles V., defeated the Turks and Corsairs, and died in 1560, at the age of 93.

Genoa to Leghorn.

We re-embarked again at evening, and at 6 o'clock the next morning were safe in Leghorn, Livorno of the Italians.

It had been our intention to visit Pisa, but the shortness of the time that we could be allowed there, induced us to remain quietly at our hotel, engaged in writing up our journals and in resting from the fatigue of an uncomfortable passage: most of the passengers were sick, and although I am not particularly sensitive in that way, I was more affected than on the Atlantic. This was, doubtless, occasioned by the buoyancy of our little iron Bosphore, a mere toy when compared with our colossal Atlantic steamers. The Bosphore is, however, an excellent small ship, of beautiful model, and very well managed: the officers and cabin-servants were also very attentive and kind. But, of course, such small steamers feel the impulse of the waves much more than the large vessels. On our arrival at Leghorn, our courier managed well with the military and fort officers, and we were detained in the small boat only half an

hour, when we were rowed a long way on a circuitous canal running through the city, and were landed at the door of our hotel. Of the city of Leghorn, our view was transient.

Although it belongs to the Duke of Tuscany, it is at present, under Austrian protection—or rather domination, with a garrison of German troops. Leghorn is a beautiful city; the streets are generally wide; very well paved with large stones accurately fitted to each other; in the best parts of the town, the houses are large and elegant; much of the place is quite modern, and no part of it appears very ancient. It was not known to the Romans, but has been built up by commerce in modern times. Leghorn, with its fresh cream-colored houses, presents a most striking and agreeable contrast with the crowded, gloomy, and filthy French and Ligurian towns and villages, through which we have passed.

No doubt, Leghorn owes much to the English, who have had and still have large establishments here. Their cemetery, which we saw, gives painful proof that many of them have here found their final resting-place.

The English cemetery is now surrounded by the newer part of the city, and there is an English church near by. On our way we passed the grand promenade of the city; it is a beautiful square, and is adorned by a colossal statue of the late Duke of Tuscany, who was a great benefactor to Leghorn. There was also a statue of the present duke, which was much admired as a work of art, but was broken in the popular insurrection in 1849. Near the new English cemetery there is a grand station house for the railroad to Florence.

The extensive barracks are at present occupied by some thousands of Austrian soldiers, nominally protectors, but really masters in Tuscany.

THE AQUEDUCT AND FOUNTAIN is a very fine establishment for supplying the city with water, and was the most interesting thing which we saw in the place. It is a very beautiful structure of stone, covering by my estimation three-fourths of an acre. It receives the water by large iron tubes passing under ground from a mountain 14 miles distant in the interior, and

brought across the country by an aqueduct upon the Roman model. The stream delivered is 5 or 6 inches in diameter, and it is discharged under a powerful pressure into the vast reservoir, the roof of which is supported upon arches and pillars. Thus the reservoir is secluded from dust or any impurity. The water stands 30 feet deep, and is so perfectly transparent, that an inscription on the bottom, in colored letters, to the honor of the architect, is perfectly legible through the 30 feet of water, although the vast room is imperfectly lighted.

Leghorn has an artificial harbor. A strong sea wall, duly fortified against man and the elements, repels the billows, and a quiet basin within gives ample security to the ships. Among them we did not happen to observe the American flag, although so often to be found here.

Leghorn to Civita Vecchia.

At 5 o'clock, P. M., having passed eleven hours in Leghorn, we again embarked on board the Bosphore, and were soon under steam for Civita Vecchia. A quiet night and a smooth sea gave us no disturbance. We continued on deck to observe a fine Italian sunset; fine, indeed, it was, but not finer than many which we have at home; hitherto I have seen no purer azure than in our own cloudless blue canopy. We passed between Corsica, the birth-place of Napoleon, and Elba, his first place of exile (after the Russian campaign). Both were distinctly visible at the distance of a few miles, and as we sailed beyond them twilight deepened its shadows, and they gradually faded away like a retiring cloud, and sunk beneath the horizon.

It was quite natural that our veteran courier, on seeing these islands, should find his military enthusiasm and personal attachment revive and rekindle, as the name of Napoleon was often upon our lips. We encouraged him to bring forth his youthful reminiscences, and we lingered on the taffrail to hear

moving recitals from this humble eye-witness of Smolensk and Borodino—of Moscow in flames—of retreating squadrons frozen stiff, and buried beneath the snow—of the fatal passage of the Beresina—of the desperate and protracted conflicts of Dresden and Leipsic, and of the final humiliation of Fontainebleau!

At 6 o'clock, A. M., the next day, we were safe in the

HARBOR OF CIVITA VECCHIA.—It was a bright morning, and we had leisure to observe the peculiarities of this remarkable harbor, the only seaport of importance within the dominions of the Pope. The basin is altogether artificial, and was originally constructed by the Emperor Trajan (*"Olim portus Trajani dictum"*), and the present structure is erected upon the original foundations. It is at once a high sea wall, and as it seemed, a naval work of great efficiency. The harbor is entirely inclosed, except at one narrow entrance, and flanked on both sides by round towers, on which cannon are mounted. In front there is a very large castle constructed by Michael Angelo, and on both sides of it there are embrasures for artillery, pointing outward on the sea wall, but the position of the artillery could be easily reversed, and directed into the basin or against the town. This artificial harbor is an excellent example for our country, particularly for the great lakes, which, like the greater part of the shores of the Mediterranean that we have seen, are almost destitute of good natural harbors.

A health officer came on board, but fortunately we had a clean bill. The military and custom-house officers were also to be propitiated, and after a tedious delay of an hour and a half we were permitted to land from a row-boat. Determining to leave the steamer, and to travel post to Rome, we had only time for a breakfast, and could observe no more of the place than was visible from the balcony of our hotel.

In this view the town was handsome, with wide areas and beautiful buildings of elegant architecture. Civita Vecchia (*Vetus Civitas*) is a place of no great importance, except as a seaport and as a station for steamers—all that navigate this coast, call here. The population of Civita Vecchia does not

exceed 6,000. In the hotel where we stopped were several chiefs and their retainers, from Monte Negro, in the mountains between Turkey and Austria. They were dressed in wild semi-Asiatic and barbaric costume, and were equipped with a load of weapons. They wore a sash which supported two long pistols highly ornamented, a sword and a dagger, all chased with decorations in silver in great profusion. Except the highest chief, who was dressed in European costume, and behaved like a civilized man, the rest stalked about the rooms in a very ostentatious manner, evidently proud of their arms; they seemed to take great satisfaction in passing back and forward through the room while we were at breakfast. They were powerful men, of great stature, and seemed but little elevated in civilization above our North American Indians. Like all barbarians, they are overfond of ornament. They seemed ready for instant action, and no doubt the slightest supposed insult would have drawn those pistols from their girdles, and the daggers and swords from their sheaths—

Nemo me impune lacessit

was obviously their feeling, if not their motto. If they are fair specimens of the Grecian or Turkish mountaineers, what ideas can such men have of regulated liberty and security derived from public law and the ægis of national protection, which supersede personal defence and private combat?

Civita Vecchia to Rome.

We had a lovely day for our posting to Rome (75 miles). Our departure being late in the morning, we had hard work, with poor horses, to accomplish our journey. Except for its historical associations, I have rarely passed over a more uninteresting tract of country. Much of it lies neglected, and in utter desolation, overgrown by shrubs, furze, heather, broom,

and diminutive trees, if trees they could be called. Of villages there were none. A few miserable clusters of ruined stone houses, serving as stations for changes of post-horses, and some bridges in ruins, apparently Roman, and a large ruined castle at Santa Severa,* on the sea-shore, about half way to Rome, were all the structures that we found in our route. At some distance on our left there was a decent village near the Apennines, which appeared to run about 8 or 10 miles from the coast; the country between, over which we were passing, was generally level, and the hills, when they occurred, were of a gentle acclivity. The road was very good, and was occasionally paved. There was an interior road, running farther from the coast, but as it had become very bad, a new road, on which we were now travelling, near the sea-shore, had been constructed, and was opened in 1847. We were glad to find, as we advanced, that agriculture was not entirely neglected. We saw some very large fields of wheat, and oats, and meadow grass. They were rarely inclosed by fences. The flocks of sheep, as we proceeded, became more frequent, and were in general in fine condition; they were attended by ragged old men, with powerful shepherds' dogs.

In general, the few people we saw were ragged, squalid and dirty, and presented every appearance of extreme degradation. At every stopping place to change horses, at every bridge, we were importuned, and from almost every miserable hut we were pursued by beggars of the most persevering character. Some were infirm, or crippled, or deformed, and were proper subjects for charity. Most of our persecutors were, however, active youths and children, more especially little girls from 8 to 12 years of age, dirty and forlorn, but plump, and their brilliant black eyes beautifully set off by their brown features. They followed us with astonishing perseverance, running by the side of the coach for a mile or two, with an earnest and imploring look; they repeated their demands in a soft, plaintive

* An ancient port now in ruins, supposed to have been the station of the Tyrrhenian pirates.

and musical tone. Between pity and vexation (I fear the latter prevailed) we threw them, one by one, all our copper coins, with dates, oranges and bread; but this, so far from sending them away, only brought in more, and thus we travelled on, nowhere unattended.

REFLECTIONS.—From these petty annoyances we were, however, withdrawn by impressions of a more solemn cast. Here we were, travelling almost in the very heart of the old Roman Empire, where once there were towns, villas, villages, richly cultivated fields, gardens and pleasure-grounds. Here the masters of the world once pursued their business and their pleasures; here they marched their conquering armies over regions now desolate and waste; and the very waves of the Mediterranean, as they broke audibly upon the shore along which we were travelling, seemed to sigh for the glories that are past and the miseries that are present. Over these fields, too, has been heard, again and again, in centuries past, the onward tread of revengeful hosts, pressing eagerly forward, and rolling back upon Rome the flood of invasion which had so often burst out from her imperial gates to deluge the nations. Such reflections arose in our minds, during a tardy progress with exhausted post-horses, when we found ourselves towards evening approaching the eternal city. A country of beautiful outline, with gently curved hills and valleys, and well clothed with grass, now presented numerous herds of horses and cattle grazing in the wide-spread fields. In our entire progress we had rarely seen the ground disturbed by the plough. Some few fields were ploughed, and we occasionally met the farmers returning from their labors, bearing their agricultural instruments upon their shoulders. In general, the farmers were decently clad, especially as we approached Rome. Some were reposing in the shade, and reminded us of the scenes in Virgil's Georgics. How different were the scenes which they now contemplated, and how changed is this once fertile land!

With pleasure I name the beautiful cattle, which became more and more numerous towards the end of our day's journey.

They are of a delicate mouse color, and are large and round ; the bull is of enormous size, and the horns of all of them were very widely branched out, and have a beautiful lustre, as if they had been polished by art. There were also numerous flocks of goats, with their long curled horns twisted back upon their necks, and almost touching their flanks.

At length, in the dim distance of 16 miles, we descried the dome of St. Peter's, which alternately rose and fell as we ascended and descended the hills. Now, in the very confines of Rome, we looked intently for villas and superior cultivation, and other signs of a great and ancient city. But all was blank, until just before we arrived at the gate.

On our right we discerned, in the twilight, the arches of an ancient Roman aqueduct still maintaining its connection with the city, and on our left St. Peter's and its colonnade were imperfectly seen over the city wall. At last we entered the gate, the Porta Cavalleggieri, just at evening twilight. It was near this gate that the French army, in 1849, sustained a severe check with much loss. The remaining light was just sufficient to show us the military and civil officers and authorities who watch over the city ; and as our horses were reined up and we were brought to a stand, we were apprehending a tedious delay at the custom-house, to which it would have been the regular course to send our party and our trunks. But the skilful management of our courier, who is no stranger in Rome, very soon relieved us from anxiety, and we were permitted to proceed. We rode by the immense colonnade of St. Peter's, and the stupendous church and dome, and soon passed the only bridge of ancient Roman construction that remains—the Cælian, over the Tiber—and with no distinct perception of other objects, except the venerable Castle of St. Angelo, and now and then a church planted along the crowded streets. After driving two miles through the city, we arrived in the fine open area, Piazza del Popolo, and found comfortable apartments in the Hôtel des Isles Britannique, kept by a German. The attending servants spoke English. We had a good

parlor and comfortable bedrooms, and were at once domesticated.

We ought to have entered Rome with enthusiasm, but we had been so subdued by the scenes that had preceded our arrival, and the entrance is so stealthy, through a low valley and a crooked avenue, that even after we had passed the gate, we could hardly realize that we were in the Eternal City.

Rome.

May 5, 1851.

In the morning I awoke, and behold I was in Rome! My first returning consciousness brought a more realizing conviction than I felt last evening, that I was indeed in Rome. Rome, famous long before the Saviour appeared on earth—Rome, conqueror of the then known world—Rome, the seat of learning, arts and eloquence—Rome, heathen in the midst of all its splendors, and persecuting and destroying the Christians—Rome, prostrated by barbarians, still not destroyed—Rome, nominally Christian in after ages, then, and for centuries, a persecuting power, in cruelty rivalling her own heathen era—Rome, often torn by factions or possessed by foreign armies, and still great in her desolation;—in this very Rome, where Paul preached and died, I had now indeed arrived, and thus was about to connect the present with the past, by surveying its ruins, physical, mental, and moral. The sound of the bugle and the trumpet called me early in the morning to my window. There were many cohorts of French infantry at the hour of six, going through their drill in the beautiful square of the people, and soon brilliant squadrons of cavalry defiled near the hotel, winding in a long train over the square and up the Pincian Hill—many—many hundreds, until it seemed as if there would be no end. Now and then, at a sharp word of command their flashing sabres sprang from the sheaths, glittering in the morning sunbeams as menacing the tremendous charge of cavalry in battle. The present

force of the French army in Rome is 20,000 men, quartered in and near the city. They possess all the strong points—the Castle of St. Angelo, the ancient tomb of the emperors, and the more modern fortress of the Popes, is now bristling with French bayonets.

Any one who has attempted to view Rome in a fortnight, needs no assurances of the impossibility of seeing even the exterior of all her monuments. Our experience, however, convinced us that by great industry, and the best economy of time, much may be done even in so short a period. We were fortunate in the choice of our worthy guide, Santè Beltera, well known to many Americans as a most competent and zealous cicerone. We had always at command two open carriages, for the greater economy of time, working all day, from 10 to 12 hours each day—dining after dark, and recording our observations at night. As our active review of Rome has advanced, we have found ourselves, day by day, able to comprehend more and more, the vastness both of the past and the present, and have become somewhat familiar with this wonderful city.

On our wheels, or on our feet, we have ranged far and wide, in and around it, and we no longer feel like strangers.

Even this short familiarity has deepened our impressions of what Rome has been in her days of prosperity and glory; and fallen, as she is, from her high eminence, she is still splendid and venerable in her ruins. It is surprising that so much of ancient Rome should remain after the devastations of war and the dilapidations of time.

VICISSITUDES.—Rome has been, again and again, ravaged and burned by Barbarian armies, and again and again, has it been besieged and taken by the hosts of Christian nations. It has been trampled under foot, not only by Pagan legions, but by those who fought under the banner of the Cross, and last of all, a great nation which ought to have been well instructed in the value of liberty, by the sanguinary struggles, both domestic

and foreign, of sixty years;—itself, in name, a republic,* has sent its disciplined bands to crush the commonwealth of Rome, as it was rising again from the tomb, after the slumber of ages.

Piles of ruins, without and within the walls—and the walls themselves show, both by their breaches and by their repairs, how, in the course of ages, they have suffered. Recent ruins of villas and palaces, and devastated regions, two years since covered with forests, now prostrate; and then rich in cultivated fields, now overgrown by weeds and shrubs, attest the severity of the late contest. The odious sound of foreign bugles and trumpets, the martial array of infantry and cavalry, the hated vigilance of French sentinels in every public place, force on the Romans the painful conviction, that the Gauls are again masters in Rome. Should the army which, at present, imposes upon this city a false tranquillity, be withdrawn, as were the Roman legions of old from Britain, the Austrians would soon fill Rome with their troops, which now swarm in Lombardy and Tuscany. We cannot even discern the rising dawn of hope for oppressed Italy.

SPOILIATIONS.—If the stupendous and beautiful structures of ancient Rome had suffered from war alone, there would have been an end to the devastation.

But architecture and art, and ancient institutions have suffered immensely from a worse enemy within the walls. A false view of duty, and groundless fears of the effect of pagan temples and theatres, and even forums, upon the religious feeling of a nation, nominally converted to Christianity, under the imperial sway of Constantine, led to the most wanton devastation of all that was connected with pagan grandeur.

Ancient Rome, notwithstanding the noble efforts of Napoleon and of some of the Popes, towards disinterring the Forum, the triumphal arches, and other interesting structures—ancient Rome still lies, in a great measure, buried beneath accumulated

* Now a Despotism, March, 1853.

sents a striking and highly picturesque combination. The tomb is a very large, round monument, resembling that of Cecilia Meletta.

HADRIAN'S VILLA.—To inspect these ruins was one inducement to visit Tivoli, at the foot of whose mountain they are situated. Hadrian's Villa is indeed in ruins. Excepting the barracks, not one apartment is in perfect preservation; but there are many walls and outlines. It was a busy occupation of two hours merely to walk through these ruins. One is astonished at the magnitude of the ancient Roman establishments. This villa of Hadrian (for he had still another at Palestrina), had, including all its buildings, a circuit of eight to ten miles, and was, in fact, a town. It contained a Lyceum, an Academy, a Vale of Tempe, a Serapeon of Canopus (Egyptian), a library, barracks for the guards, a Tartarus, Elysian fields; numerous temples, and a Greek theatre, whose outlines are still visible. There was also a marine theatre, whose walls are now nearly perfect.

Hadrian assembled in this villa an astonishing number of works of art, collected especially in illustration of his own travels. They have been chiefly removed from the ruins, and are to be seen in the Vatican. The Egyptian antiquities especially are very splendid, and most interesting. The beautiful marbles which incrustated all these walls have been ruthlessly torn down by the modern Romans, and burned into quicklime, or appropriated to adorn modern palaces. The Venus de Medicis, now at Florence, was taken from a niche which is still shown in the Temple of Venus.

We can never sufficiently regret that his splendid villa had not been allowed to remain as Hadrian left it in the year 138 of the Christian era, when he died.

TIVOLI.—From the Villa of Hadrian we ascended to Tivoli, on the side of the mountain Ripoli. The town itself is mean, with narrow and dirty streets, and a squalid population of 6300 people meanly representing its former grandeur. It was a favorite resort of the Romans. Horace rambled and mused here, and has left on record his earnest wish that he might here pass

the evening of his years. Syphax, the Numidian king, died here two years after his captivity, 202 B. C., and Zenobia also ended her days in Tivoli, after gracing the triumph of Aurelian. She was allowed a beautiful villa, surrounded by all the pomp of an Eastern princess.

But to the scenery. The whole world have heard of the beauties of Tivoli. Have they been exaggerated? I think not. We will resort, then, at once to the fine little antique temple of Vesta, the Tiburtine Sibyl. It is a circular structure, only $21\frac{1}{2}$ feet in diameter, partly in ruins; but of its colonnade of Corinthian pillars, ten pillars out of 18 remain. It stands upon a giddy pinnacle of rock, just at the inner edge of the village. Beneath the projected shadow of the temple we took our seats, on a warm day, while we refreshed ourselves with oranges, and gazed with interest at the splendid scene.

We were in the midst of a group of mountains apparently 1500 feet high. They are arranged in a circular form, very near to each other, standing face to face, and foot to foot, forming an abrupt and precipitous amphitheatre. Down the side of the mountain nearest to us, a delicate ribbonlike cataract was precipitated, with a gentle movement, and lost itself in the abyss, hundreds of feet below. A little further off, a much larger stream rushed down the mountain-side, in a splendid river, snowlike, resounding as it fell, while a cloud of spray glittered in the sunbeams, and revealed a brilliant rainbow. Thus far, all was beautiful below, and grand above; for the bleak and barren mountains, with naked rocky precipices and pinnacles, formed a strong contrast with the silvery cataracts and the bright verdure of the vale.

We now descended by a circuitous and zig-zag path, cut in the rocky and often perpendicular cliffs, until we discovered another cataract, rushing from a vast dome in the mountain, formed by an avalanche of the rock, whose massy ruins were around us, and disclosed, by their fracture, a concretionary structure in parallel layers, evidently a gradual deposit from so-

lution in water. It is from such masses, that the so called Oriental alabaster is obtained, of which one sees so many specimens in the Italian churches.

We were now led through an artificial gallery, excavated in the limestone rock, with windows to look out on the scenery. Advancing to various points of view, we found ourselves at the bottom of the descent. Here stood seven donkeys in waiting, corresponding to the number of our party. The donkeys were caparisoned for the occasion, with rope-halters for bridles; they had, however, secure saddles, and two of them were chair-shaped, with backs, for the reception of the ladies. For myself, I selected the longest stirrup-straps, and mounted the meanest of these humble animals. Our little train wound up the opposite side of the gorge, in a zig-zag path, cut out of the rock as before, and rendered secure by a good rampart wall. Several attendants followed to urge on the tardy animals, and a separate individual watched each of the ladies. We soon arrived at the place where the principal cataract, which we had seen from the other side, issues in two streams; after turning a point in the rock, they instantly coalesce into one, and then the united torrent rushes thundering down.

In 1826, a dreadful accident was caused by an inundation of the river, which then passed through a part of the town; it overthrew a church and 36 houses, precipitating them down the abyss. Influenced by this calamity, the reigning Pope, Gregory XVI., resolved to turn the river from the town, and for that purpose, caused two wide and lofty tunnels to be excavated quite through the mountain.

You look, a long distance through these galleries, and the daylight, admitted at both ends, enables the traveller to pass securely through, on a broad footpath, cut out of the mountain rock. This perforation is a noble monument to the honor of the humane and enlightened Pope, under whose orders this great work was done.

CATARACTS.—Out of this artificial channel the river Anio rushes, in one grand torrent, close to which we descended by

excellent stone steps, where it is precipitated in a magnificent cataract on this bright day, we enjoyed its clouds of spray glittering with gems, its splendid coronet of rainbows, and its ceaseless roar.

Mounting to the ample platform, at the top of the stairs, we were soon again on the backs of the donkeys, and wound our way leisurely, in a large circuit, quite around the mountain amphitheatre. At every step, the view was unfolded more and more beautifully. Tivoli, perched upon the top of the opposite mountain, appeared like a castellated fortress, and in its numerous wars it has often sustained that character. As we proceeded, cataract after cataract was disclosed,—larger and smaller,—threading their way down the mountain from the Tivoli side. Seven cataracts were in view at one glance. They were beautifully contrasted with the rude rocks above, and the intense verdure below: the entire scene formed a delightful panoramic view, and it added no small interest to the prospect, that it had been seen and admired for more than 2000 years, by illustrious men and women, whose names glitter in these ever passing and ever renovated streams, and are inscribed by memory upon the everlasting mountains.

A faithful and most beautiful series of views of the falls of Tivoli and Terni, was made by Gmelin, towards the close of the last century, and the prints taken from them are well known to lovers of art.

RETURN TO ROME.—Returning to Tivoli, we gladly dismounted from the donkeys, and resuming our carriages, drove rapidly down the mountain, passing the ruins of the villa of Mæcenas, as well as several other ruins and splendid rural palaces, which we had not time to visit.

Tibur existed as an independent state, 500 years before the founding of Rome, and after its subjugation, it was always, through succeeding ages, associated in a conspicuous manner, with Roman history. To explore the antiquities of Tivoli, and to visit Horace's Sabine farm 12 miles off, would require several days.

On our return we passed rapidly over the Campagna by the road which brought us out from Rome. From the mountain it appeared like a yellow thread, winding through the fields and meadows. Twilight was already upon us, and we hastened to escape the chill damps of evening, which we felt the more from their strong contrast with a warm day, and some transient reflections passed through our minds upon the malaria of the Campagna, as we drove into Rome and were soon sheltered in our comfortable hotel.

Rome from the Tower of the Capitol.

May 12.

We ascended to the summit of the tower which crowns the Capitol.

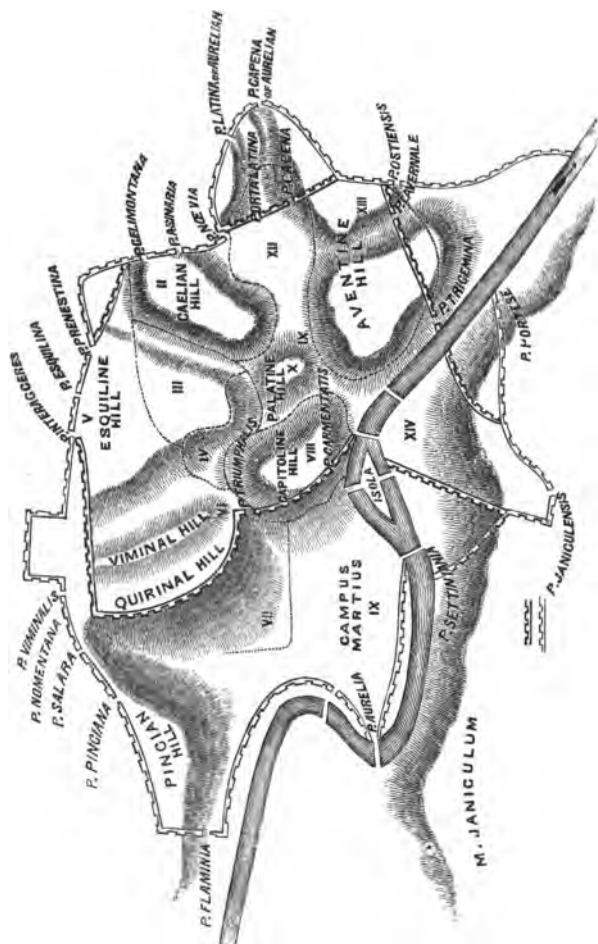
This comparatively modern building stands on the foundation of the ancient Capitol, and affords a commanding view of Rome and of the surrounding country. It is the best position from which to make out the seven hills of ancient Rome, whose position the observer is soon able to recognize after a little trouble, and with the aid of a good map or guide. We will suppose one to stand on the Tower of the Capitol, and to take first a general panoramic view. He sees the Tiber making three great curves, as it passes along through or near to the city. The first curve on the north is near the Flaminian Way, by the Porta and Piazza del Popolo (on the extreme north of the city, where the wall forms its boundary). Here the modern city begins. The curve which I now mention winds east and south into the city. The next curve runs west and south, by the Castle of St. Angelo, and towards St. Peter's. The stream then runs south and east, until it arrives opposite to the Capitol, when it again turns and passes south and west, and flows onward 18 miles, to the ancient port of Ostia, at its mouth (now a trifling village). The usual elevation of the river above the level of the sea is 35 to 40 feet, and it runs about 3 miles within the city,

from wall to wall. To the northwest, beyond the Tiber, and at the very verge of the city on that side, the observer sees the dome and colonnade of St. Peter's at the foot of the Monte Vaticano, towering above every other object. Turning to the north, and just by the Piazza del Popolo, he sees the large and beautiful Pincian Hill (Monte Picino), bounding the city on that side, and itself shut in by the city wall. Neither the Vatican nor the Pincian Hill was included within the ancient city, nor are they to be enumerated among the seven hills of classical association.

The height of the hills within the walls is from 120 to 160 feet. The Pincian is very beautiful, being adorned with avenues of shade-trees, and laid out with taste and skill. Our hotel is exactly at its foot, and we are often tempted to ramble there; the prospect is very fine, especially into ancient Etruria, on the right bank of the river. Looking over the wall, the devastated domain of the ancient Borghese villa is seen, a painful souvenir of the revolution of 1849. It proved a useless waste, as the French attack was not made on that quarter. The grand forests of ancient trees, many of which had flourished for centuries, were cut down by the Roman army, and many houses demolished, among others, that formerly occupied by Raphael, which is now a ruin.

Turning the eye a little to the east and north within the walls, we rest on the Quirinal, the first which we recognise of the seven hills of old Rome. It is easily distinguished by the long palace of the Pope so well known by the same name. He was in this palace when, in 1849, his personal safety was endangered by a popular onset, and he was saved by his Swiss guards, 150 of whom are always in his service, and are at all times to be seen, at St. Peter's and the Vatican, in the gaudy blue and yellow uniform devised by Raphael.

To the right of the Quirinal we see the VIMINAL, which is distinguished by the ruins of the baths and palace of Diocletian, mentioned in the excursion to Tivoli. This hill is not very conspicuous, but its position is easily understood, as it is situ-



Hills of Ancient Rome.

(From Rome in the 19th Century.)

ated between the QUIRINAL and the ESQUILINE. The site of the latter is distinguished by turning the eye still a little more to the right and east. The most conspicuous object upon it is the church of ST. MARIA MAGGIORE, whose domes are eminent above all surrounding objects in that part of Rome.

Directing our survey to the southeast, and quite in the remote parts of the city, just within the ancient walls and far beyond the present population and their houses and squares, we descry the church of ST. JOHN LATERAN, and this is on the CELIAN HILL (Monte Caelia).

Now let the observer direct his eyes to a conspicuous and almost naked hill of large area, bounded by extensive ruins, near at hand and almost at his feet; this is the PALATINE HILL (Monte Palatino), upon which the first Roman settlement was made by Romulus. The ruins are those of the Palace of the Cæsars. It is at present the most conspicuous of all the seven hills of Rome. The observer will next look still further to the right, and a little more to the south and west, and he will readily discover a green hill, hardly occupied at all by houses, and separated by a distinct valley from the Palatine. This is the AVENTINE HILL (Monte Aventino).

Thus we have the seven hills of ancient Rome, most of which are depopulated, or partially peopled, or occupied only by a few public buildings. The great central hill, the seat of the glory of ancient Rome—the Palatine—lies in utter desolation, and the Aventine and Celian are little better.

On the right bank of the Tiber, and quite beyond the limits of ancient Rome, there is an important hill—the JANICULUM (Monte Gianicolo). It was the principal seat of the French besieging army in 1849; it is outside of the city wall, which is much scarred and mutilated by their cannon balls. The first battle between the French and the Romans, in May, 1849, was fought in a valley at the foot of the Janiculum Hill, which lies west and south from the main body of the city. The besieging armies were planted on hills contiguous to the Janiculum, and although the Romans made a brave defence, the walls were

breached in many places, and quite levelled in two, at one of which the French army entered, when a bloody battle ensued in a narrow valley within the walls.

There is still another hill—a very high one; it is called **MOUNT MARIA** (*Monte Maria*). It is on the right bank of the Tiber, north and west of the city, and is without the walls. It was occupied by the cannon of the besieging army, and by way of intimidation to the people of Rome, and as a diversion from the main design of assaulting the city on the side of the Janiculum Hill, they threw bombs into the square where we are residing, which fell through this very house, and in still greater numbers in the *Hôtel Russe*, which is very near.

There is still another hill, which is, however, hardly worthy of being mentioned in so dignified a connection; it is called **MONTE TESTACEO**. It is composed entirely of broken earthen vessels of very coarse ware. This hill is near the Aventine; it may be 250 to 300 feet high, and a quarter of a mile in circuit; by my own examination, I found it to be composed of such coarse fragments as belonged to amphoræ, &c. It was raised from the accumulations of ancient Rome, for it seems that they were not permitted to throw such fragments into the streets. Many wine cellars are excavated in the Monte Testaceo, a use to which it is particularly applicable, on account of its low and equable temperature, a quality due to the porous nature of the material of the hill.

GENERAL VIEW OF ROME.—Having defined the principal natural features of Rome, we may now view it as a whole. Retaining our position on the Capitoline Hill, and casting our eyes all around, we see a vast area inclosed by the ancient wall—the wall of Antoninus—which, with the modern wall, includes an area of 12 miles in circuit. Much of the ancient wall retains its original elevation of 40 to 50 feet. Looking to the south-east and northeast, we have before us the Rome of the Cæsars; behind us, and to the west-northwest and southwest, is the modern city—the Rome of the Popes. Almost the whole area of the Cæsars is desolate, with a very small population,

and having only some churches, of a period since the Christian era, and extensive ruins of Roman establishments, of baths, palaces, and other structures.

Immediately at our feet, beginning at the very base of the Capitol Hill, there is a magnificent display of the ruins of ancient Rome—of the Forum and its temples—of the Triumphal Arches—of the Palace of the Cæsars, and the Coliseum.

THE ROMAN FORUM.—There has been much discussion as to the form and extent of the Roman Forum, and as to the use of some of the structures whose ruins are found within its area. Sometimes the word forum was applied to market places—forum boarium, fora venalia, as well as to places where justice was administered, *fora civilia*. The great Roman Forum at the foot of the Capitol, and contiguous to the Palatine Hill, was, no doubt, intended by Romulus for the assemblies of the people. It was adorned with an immense number of Grecian statues, among which were twelve gilt statues of the principal gods. Numerous relics of its former grandeur now fill the *campo vaccino*—broken porticoes, ruined arches, single columns, and the remains of temples. To each of these belongs a story of curious antiquarian research. Without wishing to follow the beaten path of all travellers, it is impossible to pass these world-renowned memorials of a goneby age without some brief notice.

THE ARCH OF SEPTIMIUS SEVERUS stands in the Forum, on the eastern front of the Capitol. The soil and rubbish there accumulated was 15 feet deep, but the ground was excavated under Napoleon, and the whole of this fine monument was thus brought into view. It was erected A. D. 205, by the Senate and people of Rome, in honor of the Emperor and his sons, on account of their conquests of the Parthians and Persians. This is recorded upon the monument, in an inscription which is still perfectly legible. The monument was constructed entirely of Grecian marble. There is a large and lofty middle arch, and there are two lateral arches. In one of the columns is a staircase of 50 steps, leading to the top, on which there was origi-

nally a car drawn by six horses, containing the figures of the Emperor and of his two sons, Geta and Caracalla. Geta was murdered by his brother, and the inscription which alluded to both was mutilated by Caracalla, so as to leave out the name of Geta; this obliteration is obvious on inspection. There are on the panels many figures in high relief, representing deeds of war, in which the Romans so much delighted. Christian nations cannot boast of much improvement in this particular.

JUPITER TONANS.—The excavation which brought into view the foundation of the arch of Septimius Severus is a deep pit, in which stands a group of three beautiful Corinthian columns of marble, nearly in the middle of the area. Very different views have been presented by antiquarians as to their origin. They are now attributed to a splendid temple erected to the honor of Jupiter Tonans, by the Emperor _____, who, on a journey in Spain, was spared when a stroke of lightning killed his attendant sitting by his side. Before the French excavations, these beautiful columns were buried in rubbish nearly to their capitals. They are of Carrara marble, deeply fluted, and are 4 feet 5 inches in diameter, and 50 feet high. The frieze exhibits instruments of sacrifice—the knife, axe, hammer, patera and the flamen's cap.

TEMPLE OF CONCORDIA.—There is a group of eight Corinthian columns of granite, which are assigned to the Temple of Concord, and still another group of three columns near at hand. All these sustain the entablature and a part of the ornaments of the frieze. Santé, our Cicerone, whom I have already mentioned as a very intelligent and reliable man, told us that when a boy he had picked leaves of plants from the capital or frieze of the group of three columns; and of course there must have been then 30 or 40 feet of earth and rubbish, which has been removed. The removal of the incumbent materials has also revealed the ancient VIA SACRA, which passed beneath the arch of Septimius Severus. It is in a perfect state, and is composed of large, flat, and irregular blocks of lava, not dressed, but skilfully joined. This road, after passing the arch, turns to the south

up the hill; but it is not understood how it mounted to the Capitol, which was the terminus of the triumphal processions. There can be no doubt, that if the earth and rubbish were all removed, the Via Sacra would be found as perfect as when Horace walked upon it, for the stones appear again near the Arch of Titus, at the eastern extremity of the Forum, and the walk passes beneath that arch also. This is the common road now travelled through the Forum, and wheel ruts are quite distinct in the ancient pavement.

It was easy to see, in imagination, the Roman poet traversing the Via Sacra, on that occasion when he sang the well-known words commencing—

*Ibam forte Via Sacra sicut meus est mos
Nescio quid meditans nugarum, totus in illis, &c. **

Three beautiful columns, ascribed to JUPITER STATOR, stand in a more advanced position in the area of the Forum, not in the cavity which has been described, but in another. They are in high preservation, with the entablature nearly entire.

The Column of PHOCAS stands in a cavity by itself. A column was erected to the Greek Emperor Phocas A. D. 608; but although this column bears his name, it has been supposed to be much more ancient, and to belong to the period of the Antonines. An inscription was, however, found on its base in 1813, proving it to be the column of Phocas, and recording that a gilt statue was placed upon it to that emperor by the Exarch Smaragdus.

Standing with the back towards the Capitoline Hill and the Arch of Septimius Severus, and looking east, we find on the left the remains of the Temple of ANTONINUS PIUS, and his wife FAUSTINA. The modern church of S. Lorenzo in Miranda, is immediately behind. The old Roman inscriptions were

* Lib. i. Satira ix. This race of people, whose memory he perpetuates, is not yet extinct, and the despair of the poet is not without examples in our times.

deeply cut, and in general are perfectly legible at the present day. On the entablature, this temple is impiously dedicated by the Roman Senate.

The ruins of the **TEMPLE OF PEACE**, are situated on the same side of the Forum as the Temple of Antoninus and Faustina, and very near to it. Although there is little remaining except three very large arches, it is a very conspicuous ruin. It was built by Maxentius, but was consecrated by Constantine, after the death of his rival.

ARCH OF TITUS.—This is the most beautiful of the Roman arches, and was erected to commemorate the conquest of Jerusalem by Titus. It stands at the eastern end of the Forum, and the Via Sacra passes beneath it. It is built of Grecian marble and has only a single arch, with fluted columns on each side. On the side towards the Forum there is a mutilated figure of Victory standing over the arch. The side towards the Coliseum is the most perfect; and nearly all the cornice and the antæ are preserved. This arch has a peculiar interest attached to it, because it illustrates Scripture history. On one of the bas-reliefs, inside of the arch, a procession are bearing the spoils of the temple—the golden candlestick and the silver trumpets—the only authentic representations of those sacred objects, and perfectly corresponding with the description given by Josephus. The seven-branched candlestick itself was lost in the Tiber, and now reposes amidst its yellow sands.

THE CAPITOL.—I have already remarked, that the modern Capitol is erected upon the foundation of the ancient. The huge blocks of peperino stone which underlie the present Capitol rise from the area of the Forum, far below; and it is quite obvious that the modern structure is superimposed. The Capitol Hill is the highest ground in old Rome; and the summit of its tower is, as already observed, higher than any other building in Rome east of the Tiber.

We ascend to the present Capitol from the west, by a series of marble steps. On the right and left, at the top of the

stairs, are antique equestrian and colossal statues of Castor and Pollux, mounted upon high pedestals.

In the middle of the area, in front of the Capitol, is the colossal equestrian statue, believed to be that of Marcus Aurelius. It is in bronze, and is a most noble specimen of ancient art. The emperor is truly imperial, and the horse is admirable; it cannot be exceeded in symmetry and grandeur. This statue, had it not been mistaken for a statue of Constantine, would have shared the fate of other productions of Pagan art. It was originally gilded, and the gold is still visible upon it here and there. The head and neck of the horse are copied by modern sculptors, as being the best specimens of the form of this part of the noble animal in existence. We saw a copy in the studio of the American sculptor, Mr. Crawford, in Rome, who was then engaged upon his great monument to Washington, and the other illustrious sons of Virginia.

ROMAN MILE STONE.—The Roman *Milliarium Aureum* was discovered in the Forum a few years since. It is a marble column, with an inscription, and indicated the place from which the distances to all parts of the Roman empire were reckoned. It stands now on the right as you ascend the steps of the Capitol. There is a second and similar one on the left. After my return to England, I saw in the British Museum the large gilded globes of metal, fifteen or eighteen inches in diameter, which were formerly placed on the top of the mile stones.

MUSEUM OF THE CAPITOL.—This museum is situated in two wings, on the right and left of the Capitoline Hill. They do not form a part of the same structure. It is exceedingly instructive, as the statues are very numerous; and we cannot doubt that they exhibit faithfully the persons of the ancient Romans, with their features and costumes. Many of the most distinguished Roman emperors, poets, historians, and orators, are represented in marble or bronze. Trajan, Caligula, Hadrian, Nero, Nerva, Julius Cæsar and his murderer Brutus, Cicero, Virgil, Caracalla, and a multitude more. Some of the statues are colossal. There are several parts of an immense statue of

Nero, which was designed to be 150 feet high, and to rival in altitude the Coliseum itself. In crime and infamy, he was indeed a colossus. His countenance has a grovelling animal expression, very strongly marked in a bust which we have seen in a private museum, where, as if to correspond with the blackness of his character, he is sculptured in basalt, or black marble.

We saw also in the Museum of the Capitol the original of that bust of Cicero, which represents him as a large man with a full face and round head, the very reverse of the bust formerly said to be Cicero's, and which I saw in 1805 in the Earl of Pembroke's palace, near Salisbury, England. That bust made Cicero's features lean, muscular, and sharp, with a wart on the right cheek, near the nose. Artists and antiquaries have no doubt, I believe, of the authenticity of the bust in the Capitol, which bears his name, and was found in a villa of Mæcenas. An excellent copy of this bust, by our countryman, Crawford, was presented by Professor Salisbury to the Trumbull Gallery in Yale College, along with copies by the same artist of the busts of Demosthenes and Homer, the originals of which we saw in the Capitol Museum.

In this museum are also to be seen the celebrated Venus of the Capitol, to which a separate saloon is devoted. The Dying Gladiator is in a room with other noble antique statues. Byron has completely embalmed this figure in his memorable description in the fifth canto of *Childe Harold's pilgrimage*. It is probable that the artist himself, could he have read the passage, would have confessed that it expressed his sentiment even more perfectly than the marble. Any one who has traversed Italy with Byron in his hand, will readily appreciate not only the wonderful fidelity of his descriptions, but that all other language seems poverty-stricken and unmeaning when compared with the masterly touches by which he has painted the various monuments of antiquity which adorn his pictured page. For example, besides the passage just alluded to, we have his tomb of

Cecilia Metella, the Thunder-stricken Nurse of Rome ! the Coliseum, the Pantheon, and St. Peter's, &c.

The original bronze wolf, representing the early nursing of Romulus and Remus, is in the Capitol Museum. The little urchins, also in bronze, are eagerly drawing from the savage wet nurse the means of life. This fable affords not an unapt symbol of the ferocious disposition of Romulus, who slew his brother, and of most of the Roman people, of whatever rank, to whom human blood seems to have been a delightful nectar. There has been much discussion as to the antiquity of this wolf. It appears probable that this is the image referred to by Cicero ; and it bears marks of having been struck by lightning, according to tradition. There is a large piece of metal torn out of one of the hind legs of the wolf, and this is stated by tradition to have happened from a thunder-stroke, to which, of course, Byron alludes in his immortal lines, which fell upon the wolf the moment when it was announced in the Capitol that Julius Cæsar was dead.

STATUES IN ROME.—If we may rely upon the authenticity of the statues of Julius Cæsar, the form and features are in full keeping with what we might imagine of this great man. His figure, in full martial costume, is dignified and of fine mould, and his countenance is intellectual and elevated.

The statues of several Roman women, wives of celebrated men, are beautiful. In general, they are fully draped, and often the robe is so light and transparent, and flows so gracefully around them, as to exhibit perfectly their form. Canova has approached this airy lightness of drapery, in his celebrated statues of the dancing girls.

That part of such collections which is less pleasing to me than any other, is the monstrous creations of mythology.

We have Pan, and Fauns, and Centaurs, and Hydras, and Griffins, and Sphinxes, and other monstrosities, which, whether in sculpture or painting, were much better consigned to oblivion.

After lingering among the statues and busts of ancient Ro-

mans—both men and women—in the collections and museums, public and private, I almost feel as if I had known the individuals, and the features of several are so familiar from repetition, that I meet them like old acquaintances.

Considering the vast number of statues now in Rome, and reflecting that doubtless a host of them lie buried beneath the surface, probably more than are now visible, we might almost imagine that they would people a city. Thousands have risen from these places of temporary sepulture. The taste for statuary still flourishes in full vigor in Rome. We have visited several studios, and find beautiful things, the productions of living sculptors of all nations.

SKILL IN WORKING HARD STONES.—Marble is a material which readily yields to the chisel of the artist, and perseverance, taste, skill and judgment, will certainly educe the desired form; but I am amazed to see what magnificent works have been produced in porphyry and granite—wrought out with astonishing beauty, exhibiting the greatest delicacy of form, and polished to perfection.

I am aware that modern skill masters the hardness of such stones, but I am not aware of any modern productions of this nature, that are equal at once, in magnitude and in the perfection of the work, to those of the ancients.

Statues remain, while pictures are destroyed; they may indeed be mutilated, but hosts of them exist intact; they rise uninjured, from the sepulchres of Pompeii and Herculaneum, but pictures, unless frescoes, perish. Not a single easel picture, of ancient Greece or Rome, survives. Painful, indeed, it must be, to the artists of the easel and pencil, to be assured that no production of their talent and skill can possibly survive to a distant posterity, safe from the war of the elements, and the wars of man; while in the sister arts, the triumphs of the chisel and the furnace may live beyond even all written history, and serve to revive and illustrate its forgotten truths.

ANCIENT MAP.—One of the most interesting memorials of ancient Rome, in the Capitol Museum, is a marble pavement,

found in the temple of Remus, in the Forum. It is in slabs more than two feet square, which contain maps and plans of the early city, cut into the stone. The streets and squares are laid down, and the principal public buildings.

These plates of marble are set into the side walls, in the staircase leading up to the museum. They have proved highly useful in the study of Roman antiquities. There is also a large bronze table, containing engraved decrees of the Roman Senate.

There are, in this museum, many **SARCOPHAGI**, covered with figures in relief. One is of amazing size, in which was discovered the Portland Vase, now in the British Museum. It was found in a tumulus, on the road to Frascati, three miles from the gate of St. Giovanni. There are 40 figures upon this Sarcophagus, in alto-relievo, representing the history of Achilles, and the principal front exhibits his quarrel with Agamemnon. The figures are very prominent, and are continued on the other sides. Upon the lid of the Sarcophagus, repose two figures, the size of life.

THE TARPEIAN ROCK.—This noted precipice is very near to the Capitol. We reached it by going through a garden, in an obscure place occupied by some poor houses. It was named after Tarpeia, the daughter of Tarpeius, the governor of the citadel of Rome, whose history is known to all mythological readers.

Although the ground is accumulated at the bottom of the Tarpeian Rock, to the depth of 20 feet, it is still a precipice of some thirty or forty feet.

Not only common malefactors, but sometimes distinguished victims, were thrown from this rock. Marcus Manlius, who saved the Capitol from the Gauls, shared this fate. Becoming ambitious of the sovereignty, he was condemned on the accusation of the tribunes of the people.

THE COLISEUM is the most magnificent and imposing monument of ancient Rome. After all the spoliation which it has suffered, during many centuries, two-thirds of its materials having been plundered, to build palaces and other structures, it

still stands a stupendous ruin, solemn, awful, and even in desolation beautiful. Its position is very near to the Forum, and we pass to it through the Arch of Titus. We felicitate ourselves that we saw the almost perfect amphitheatre at Nîmes, as from that, and even from the less perfect one at Arles, we obtained those strong and correct impressions, which have enabled us more justly to appreciate the gigantic ruin, which still towers in venerable majesty, above both the Rome of the Cæsars, and the Rome of the Popes.

The Coliseum was begun A. D. 73, by Vespasian, and finished by Titus, A. D. 80, ten years after the conquest of Jerusalem. Church tradition states that its architect was Gaudentius, a Christian martyr, and that many thousand* captive Jews and Christians, were employed in its construction. It is built chiefly of travertine, although there are large quantities of bricks and tufa in the structure. Its form is elliptical; there are four stories adorned by columns; the lower is Doric, 30 feet high—the second is Ionic, 33 feet high—the third, Corinthian, 54 feet, and above this, was the frieze and cornice. The height of the outer wall was 157 English feet. The longer axis, walls included, was 620 feet; the shorter, 513; circumference 1770 feet; the length of the arena, 287 feet; breadth, 180 feet. The superficial area was nearly six acres. The arches were numbered, externally, from 1 to 80. One arch is not numbered, and this is believed to have been the private entrance of the emperor.

There were, within the amphitheatre, four groups of seats, corresponding, as at Nîmes, to the different orders of people. The seats could receive 87,000 persons, or 110,000, including those who stood. The interior has been very much despoiled, and the seats are almost ruined; but a staircase has been constructed, by which we ascended securely to the top of the building, and enjoyed a grand view, not only by day, but by a full moon. Byron's splendid description in *Manfred*, does it no more than justice.

* 12,000, according to tradition.

The building is much deformed, by innumerable holes on the outside, believed to have been produced by the extraction of the dowels of bronze, which were originally placed in the joints to keep the stones in place.

At the dedication of the amphitheatre by Titus, 5000, or according to some, 9000 wild beasts were slaughtered, and the savage exhibition went on during 100 days. On the occasion of the triumph of Trajan over the Dacians, the shows were continued 123 days; 11,000 animals were slain, and 1000 gladiators matched against each other. Besides malefactors, captives and slaves, free-born citizens, even those of noble birth, hired themselves as gladiators—and women volunteered on the arena, to exhibit their skill in murder.

The barbarous gladiatorial games were continued during 400 years; the last show of the wild beasts was under Theodoric,* and these brutal entertainments were abolished by Honorius.

During the persecutions of the Christians, the arena was often wet with the blood of the martyrs. In the reign of Trajan, Ignatius was brought from Antioch, on purpose to be devoured by the wild beasts, and the traditions of the church are filled with the names of martyrs, who perished on the arena.

THE PANTHEON is the most perfect, as a whole, of all the structures which have come down to us from ancient Rome. The invasion of time alone would not have injured it materially, and, notwithstanding the spoliations of Popes and other depredators, it still remains a grand and beautiful building. It stands in a dirty disagreeable herb market, and the accumulations of earth and rubbish have almost entirely covered its lofty steps, which were seven in number, until its floor is now nearly on a level with the street.

Its dome was covered with gilt bronze, and its portico lined with the same metal, which was plundered to be cast for the pillars and other parts of the baldacchino in St. Peter's.

* A show of wild beasts and a bull-fight, were exhibited at the expense of the Roman nobles in 1332.

On this occasion 450,000 pounds were taken. The Emperor Constans II. had previously, in 657, stripped the roof, and plundered the silver from the interior of the dome. He destined these things for the ornament of his imperial palace at Constantinople; but being murdered at Syracuse, on his return, the plunder was borne to Alexandria. It was, originally, the spoils of Egypt after the battle of Actium, and now returned to Egypt again.

The external facings of polished marble, have also been torn off—but although thus despoiled, the Pantheon is still magnificent, notwithstanding that the fires have often heated it, the overflowing Tiber has deluged its floor, and the rains have poured in at the only opening, which is in the dome. This is a circular hole in the centre of the dome, 28 feet in diameter, and is said to have been once glazed. The rich marble facings and magnificent columns of the interior, still remain.

The beautiful columns are of polished granite and porphyry. The niches, originally filled by the statues of the Pagan gods, have not been disturbed; but they are now occupied by saints, and virgins, and other symbols of Catholic worship. The interior is one vast room, 143 feet in diameter, exclusive of the walls, which are 20 feet thick, and it is of the same height, 143 feet—the dome occupies one-half of the height. It is not unaptly illustrated by the Rotunda of the Capitol at Washington,* which, although smaller, is of the same form. When in the Roman Pantheon, you look up to its sky-lighted dome, there is an impression of simple grandeur, which even St. Peter's does not produce:

"Simple, erect, severe, austere, sublime—
Shrine of all saints, and temple of all gods."

An inscription on the frieze records that the Pantheon was erected by Agrippa, B. C. Anno 26:

M. Agrippa L. F. Cos tertium fecit.

* Ninety-six feet in diameter, and ninety-six feet high.

Another inscription on the architrave records the subsequent restoration of the temple by Septimius Severus. In 608, Boniface obtained from the emperor Phocas permission to consecrate the Pantheon as a Christian church, which, doubtless, saved it from destruction. How much is it to be regretted that a similar protection had not saved the Coliseum and other precious works, whose ruins bear testimony to the misdirected zeal of the Christian church in early ages. The portico is 110 feet long and 44 deep. It contains 16 Corinthian monolithic columns of Oriental granite, $46\frac{1}{2}$ feet high and 5 feet diameter, with capitals and bases of Greek marble. The pediment still shows where the figures in bas-relief were attached.

The magnificent bronze doors are 39 feet high, and the entire opening is 19 wide. It is believed that they are the original doors erected by Agrippa. No doubt they would have been used for the decoration of St. Peter's had not the Pantheon been consecrated as a church.

The interior cornice at the bottom of the dome has been perfectly preserved, with its rich sculptures. The pavement of the Pantheon is of porphyry, alternating with other polished stones in geometric figures. Some antiquarians have argued that the Pantheon was originally an appendage of the Baths of Agrippa, and that the portico was of subsequent construction, when the building was converted into a temple. However this may be, it is one of the most interesting structures of ancient or modern times; and had it not been most shamefully robbed it would have stood to-day perfect in beauty as it was when Christ died, and when Paul preached and suffered in Rome.

We bent with deep interest over the grave of Raphael, whose remains still slumber beneath the pavement of the Pantheon, marked only by a humble slab of marble level with the floor. It is well known that until 1833 his place of interment was only matter of conjecture; in that year, owing to unexpected evidence, the present grave was opened in presence of the Pope and numerous artists. The skull was of a singularly fine form; and its discovery spoiled the speculations of the phre-

nologists on another skull in the Academy of St. Luke, which had previously been supposed to be that of the great painter.

THE TEMPLE OF VESTA stands near the Rotto Bridge over the Tiber, and close at hand are the small temple of FORTUNA VIRILIS and the House of Rienzi "last of tribunes." The Temple of Vesta has twenty Corinthian columns, thirty-two feet high and three feet in diameter; but its fine cornice and bronze roof are replaced by a wretched thatch of slates. This is not the Temple of Vesta in which the Palladium was preserved, whose site, undoubtedly, was in the Roman Forum, although it is of unknown, being of very high antiquity.

TOMB OF CECILIA METELLA.—We have visited the tombs on the Appian Way; but I shall now mention only those of Cecilia Metella and of Caius Cestus. The tomb of Cecilia Metella is well known every where, as no monument of antiquity is more frequently engraved or reproduced in models. From its size and elevated position, it is one of the most commanding objects in the vicinity of Rome. It is two miles beyond the walls on the Appian Way, quite in the country, but is distinctly seen from the Capitoline Hill. It stands on the broad stream of lava which is believed to have flowed anciently from Albano or its vicinity. We examined this lava in several places where it is quarried, and it can hardly be distinguished from trap. This tomb is nineteen centuries old, and was erected by Crassus to the memory of his wife, the daughter of Quintus Metellus, conqueror of Crete, B. C. 66. The tomb is a circular tower, seventy feet in diameter, and about fifty feet high. It stands upon a square basis, now hid in the soil. It is constructed of very large blocks of the finest travertine, accurately fitted to each other, without cement. The stones being grooved vertically, each large block appears as if it were composed of three or four pieces. The cornice and frieze are beautifully decorated with bulls' heads, and festoons. Hence it is sometimes called "Capo di Bove."

The inscription on a panel below the frieze is CECILIAE Q, CRETICI. F, METALLAE. CRASSI. The tomb appears to have been

originally covered by a circular conical roof, which was removed by Boniface VIII. of the family of Gætani, in the 13th century, and battlements were substituted, to convert it into a fortress. There are extensive ruined fortresses of the same family still existing on both sides of the road, and a subterranean communication with their family tombs was found, some years ago, beneath the Appian Way, which is here remarkably perfect. The tomb of Cecilia Metella has been robbed of vast masses of travertine to be burned into lime; and Pope Urban VIII., of the Gætani family, removed many blocks to build the Fountain of Trevi, in Rome. The walls were 25 feet thick, and the interior room was only 15 feet in diameter. We entered this desolate tomb, which has long since been robbed of every valuable article.

Alas! what does it signify, for this magnificent structure is now an empty cenotaph! The sarcophagus of white marble is in the court of the Farnese Palace at Rome; and the funeral urn containing the ashes of the once idolized Metella is in the Palace of Hampton Court in England!

"Thus much alone we know—Metella died,

The wealthiest Roman's wife. Behold his love or pride."

CHILDE HAROLD.

PYRAMID OF CAIUS CESTUS. *May 14.*—In our visit to this pyramid we met with the only instance of rudeness which we experienced in Rome, and probably this arose from excess of military observance. As we were approaching the monument, we were vociferously challenged by a sentinel, a soldier of the Pope, and with the menace of bayonet and musket we were forbidden to trespass on the premises. Such petty domination is about all that is allowed to the soldiers of Pius IX.; every important military arrangement in Rome is regulated by the French, whose troops are every where. Only a few soldiers of the Pope are seen, a mere mockery of national independence. Our guide was in no degree intimidated, and being bent on securing his fee, as the regular custode of the tomb, he per-

sisted, despite of threats, and let us into the pyramid. It is the only one in Rome, and was no doubt an attempt to imitate Egyptian grandeur and perpetuity. This monument, like every thing else in ancient Rome, has been much diminished in apparent height, by accumulations of earth and rubbish around its base. In 1663 it was cleared by Alex. VII., when 16 feet of earth were removed. The pyramid seems to be rising out of the ground, as it is surrounded in part by a deep fosse, at the bottom of which the old Roman road was discovered. We observed in it the deep channels worn by the long-continued passage of the wheels. This sepulchral pyramid is referred to the Augustan age. It is 125 feet high, and its diameter at the base is 100 feet, standing upon a square foundation of travertine 3 feet thick. It is constructed of brick and tufa, but is incrustured by a plating of Carrara marble, now quite blackened by time. The walls are nearly 25 feet thick, and in the centre is a small chamber $17\frac{1}{2}$ Roman feet, by 13 or 14 high. This chamber was discovered by a gallery perforated through the massive walls on a level with the former surface of the ground. When the entrance was effected, they found the long secluded sarcophagus, which is now deposited in the museum of the Capitol. On examining critically this internal room, they discovered steps ascending, perhaps, one-third of the way to the top of the pyramid, where a slab of marble concealed the opening. Through this aperture the funeral urn was conveyed, with its ashes, for preservation in the sarcophagus, which, from its size, must have been introduced during the construction of the pyramid. The walls of this chamber offered the earliest specimens of frescoes discovered in Rome before those of Pompeii and Herculaneum were laid open.

ENGLISH CEMETERY.—We wandered a while in this interesting place, where many English and other strangers have found their last home. There are many touching monuments—among others, those of the poets Shelley and Keats, the anatomist John Bell, and Wyatt the sculptor. The ground is immediately contiguous to the city wall, and to the monument

of Caius Cestus. This cemetery is kept in good order, is beautified by roses and shrubbery, and is in harmony with the orderly and serious character of the English people.

COLUMN OF ANTONINE.—This grand column is one of the most conspicuous monuments of ancient Rome. It is near the present Post-office, in a busy, populous square—the Piazza Colonna—in the midst of the modern city.

The height of the Column of Antonine is 168 feet, diameter $11\frac{1}{2}$; the pedestal is 25 feet 8 inches high. It was erected by the Senate and people of Rome to Marcus Aurelius Antoninus A.D. 174. Bas-reliefs, as in Trajan's column, run spirally around the monument, representing military movements and victories. One of the reliefs represents Jupiter as dropping rain from his extended arms. This has been supposed to allude to the effect attributed to the prayers of the Christian legion from Mytilene, in the army of the Emperor, who, at his request, prayed for rain when there was a great drought. The column is composed of pieces of white marble, and in the interior are 190 steps lighted by 42 loopholes. By a strange incongruity, a statue of St. Paul, 10 feet high, has been made to replace the Emperor on the top of the column. This was done by Sixtus V. It is said that the drawn sword which the Apostle holds in his hand proves a conductor to the lightning, and that the column has been several times injured.

THE COLUMN AND FORUM OF TRAJAN.—This majestic and beautiful column stands in an excavated area 10 or 12 feet below the present upper surface. Built of travertine, it rises to the height of 192 feet, exclusive of the statue. Near the top there is a gallery, to which there is an ascent by 184 steps. The column is surmounted by a statue of St. Peter, also provided with a drawn sword.

This column, like that of Antonine, is surrounded by a spiral entablature, illustrative of the history and martial deeds of Trajan. The figures are distinct, and are enlarged as they ascend. A considerable area has been excavated around the column of Trajan, as low as its foundation, and a large number

of polished columns of gray granite have been brought to light. They are all broken, but have been replaced upon their ancient pedestals, forming two double rows. They were 55 feet high, and the arrangement of columns was the same on both sides of the monument; they were parallel throughout, and were covered by a brazen roof, resting on brazen beams, so as to give protection against the weather. This forum was adorned with statues and chariots of brass, all gilt. The pavement was of variegated marble; and there was a temple at one end, and a triumphal arch at the other. It also possessed an extensive library.

In the centre rose the column where it now stands. It was crowned by a colossal statue of Trajan. The arch, as has been already mentioned, was dismantled by Constantine, to obtain ornaments for his own triumphal arch. Trajan's was the most splendid of all the forums, and was in existence at the time of the Great Gregory, about 850 years ago.

CASTLE OF ST. ANGELO.—This vast round tower stands on the west bank of the Tiber, just by the old Roman bridge, the Eliau. It was built by the Emperor Hadrian, about A. D. 130, for his mausoleum, but was converted into a fortress as early as 423. Hadrian died at Baizæ, and was buried here, as were Antoninus Pius, Marcus Aurelius, Commodus, Septimius Severus, Geta, and Caracalla, between 161 and 217.

The Castle is 188 feet in diameter, and it rises far above the city walls. It was built of peperino, and faced with Parian marble; held in place without cement. Numerous statues adorned its summit, which, during the siege of the Goths, were torn from their pedestals and thrown down upon the besiegers.

Its history, during a thousand years, is intimately connected with the wars of Rome. We saw only one sarcophagus—it was in full view; other sarcophagi may be seen by exploring below with torches. This Castle has afforded many interesting objects of antiquity. The large granite sarcophagus, and the

bust of Hadrian in the Vatican, were found here, and also the porphyry urn in the Lateran Church.

The Castle is at present occupied by the French troops, and it is not possible to obtain admission without a written permit from the Governor. This was procured by the efficient influence of Mr. Cass. Arriving at the gate, our paper was sent in by a sentinel, while we waited with the soldiers without. After considerable delay, a French Colonel made his appearance, a tall, powerful man, with firm and rather austere features, and when he waved his hand in token of admission, he did it with a lofty, military dignity. The most interesting object is the view from the summit of the Castle. All Rome, ancient and modern, was at our feet; the flowing Tiber, and the venerable bridge, with its double file of statues standing as sentinels—St. Peter's, and its magnificent colonnades—the Vatican and its gardens, and the hills of the Janiculum—St. Mario and the Borgo were just at hand; the distant Alban mountains on the south, and Soracte on the north. In the parade ground adjoining the Castle, we saw a powerful train of field artillery, ready to be turned upon the Romans, should there be any movement in favor of popular liberty. There is a large room in the attic, which, from its present appearance, was once frescoed, as were some of the passages. In the upper rooms, French soldiers not on duty were busily engaged in fencing; and all about the Castle, and leaning over the battlements, were idle men, listlessly gazing at the moving panorama of Rome.

The name of St. Angelo, the holy angel, was given to this Castle, in consequence of a reported appearance of the Archangel upon the tower, A. D. 589, to stay the progress of the plague; and his more than colossal bronze statue, black as an angel of darkness, is a conspicuous object over a large part of Rome. The Castle of St. Angelo has been for many centuries the strong military post of the Popes, into which, in times of peril, they might retreat from the Vatican, through a covered way one-third of a mile long, the greater part of which is

standing now, but the republicans breached it in 1849, so that it no longer affords a safe asylum.

Churches.

Among the 300 churches of Rome there are many that deserve to be mentioned. We have been able to visit but a few, and of these only a part can be named. This is of the less importance since there is a great similarity in their structure and decorations.

ST. MARIA MAGGIORE.—In dignity this Basilica ranks the third. In magnificence, it is little inferior to St. Peter's. The nave is 280 feet by fifty. The flat ceiling, elaborately carved, and divided into five rows of panels, is gilded with the first gold obtained from Peru, which was presented by Ferdinand and Isabella of Spain. Two of the chapels are surpassingly rich in every costly and beautiful embellishment. This church was founded in 352 on the summit of the Esquiline, and is 1500 years old. One of the most magnificent chapels is that of the Borghese family. All the splendor that can be derived from polished stones of the most beautiful colors and exquisite finish, is here exhibited. The altar of the Virgin has four fluted columns of Oriental jasper, and a painting of the Madonna, said, in a papal bull, to be a miraculous picture by St. Luke. On the altar is a bronze bas-relief, representing a miraculous fall of snow *in summer*, which indicated to the Pope the place where the church was to be built. In this chapel are several tombs of eminent men, and among them that of Paul V., the founder of the chapel.

The Chapel of Sixtus V. is also so rich and beautiful that when Sixtus, then a cardinal, was building it, the Pope, Gregory XIII., suspended his allowance, upon the ground that he must be a rich man to incur such an expense; but his architect, Fontana, loaned him all his own savings, and the work went on. The tomb of Sixtus V. is in this chapel. There are also

in this church Mosaics, in compartments, representing historical scenes in the Old Testament, which are believed to be more than 1000 years old. In this Basilica, in the course of the year, the Pope performs high mass several times, in honor of the Pentecost, the Assumption, and the Nativity; and on Christmas evening, the cradle of the infant Saviour, called Presepio, is carried in procession.

ST. JOHN LATERAN is a very venerable old church whose architecture is solemn, grand, and impressive. It is rendered still more interesting on account of the historical associations connected with it. The Lateran claims to be the first of Christian churches; and upon its front is inscribed, OMNIUM URBIS ET ORBIS ECCLESiarUM MATER ET CAPUT. Its name is derived from that of the Senator Plautius Lateranus, on the site of whose house this church was erected. Constantine was the founder; and he, with his own hands, assisted in digging the foundations. The Chapter of the Lateran still takes precedence over that of St. Peter's. Every new Pope takes possession of the Lateran Palace; and the coronation is invariably celebrated in this church. Five general councils (Lateran councils) have been held here;—the first in 1123, the last in 1515. This church is one of four that has a *porta santa*, that is, a door walled up, and to be opened only on certain occasions. The early Lateran church was nearly destroyed by fire under Clement V.; and in succeeding periods it received so many additions and modifications that very little of the original building remains. The façade was built of travertine in the last century; and upon the balustrade are placed colossal statues of our Saviour and saints, which have a striking appearance as you approach the church. The grandeur of the front is diminished by its being broken up into ornaments and details. There are five balconies, from the middle one of which the Pope pronounces his benediction on Ascension Day. In the vestibule there is a marble statue of Constantine found in the Quirinal. The interior has five naves, divided by four rows of pillars, and in the niches are colossal statues of the Apostles.

The two most magnificent chapels of this church, are the Corsini, built by Clement XII., in 1729—in the form of a Greek Cross, and the splendid chapel belonging to the rich banker, Torlonia.

It can hardly be deemed uncharitable, to regard these magnificent displays of private wealth and taste, so common in Italian churches, as only one form of human weakness and vanity, seeking, under the sacred precincts of the Church, that security and endurance, which the fury of popular revolutions has rendered impossible elsewhere. Certainly, one sees in them little of the severe and chastened simplicity of Him, whose kingdom is not of this world. This sentiment is, perhaps, tinged by another, more human, when, as in one of the cases quoted above, this pompous display is not the exponent of a name radiant with high deeds, in Church or State, nor even of one long known as the possessor of vast estates and a ducal title.

The four bronze-gilt columns, connected with the splendid altar of the S.S. Sacramento in the transept, are reported, by tradition, to have been formed from rostra of the vessels captured at Actium by Augustus, and to have originally belonged to the temple of Jupiter Capitolinus. The Baptismal Font in the Baptistery, is a basaltic vase, so large that it may have admitted of immersion; it has ever been held sacred, as that in which Constantine received the rite of Baptism. It was desecrated, in the opinion of the people, by being used as a bath, by Rienzi, the usurping tribune, the night before he was crowned in the Basilica of the Lateran.

They here showed several relics of the time of our Saviour. Among them, the table at which the last Supper was eaten, the curb of the well at which Christ met the woman of Samaria, and one of the pillars of the temple of Jerusalem, which was rent in twain at the crucifixion.

THE LATERAN PALACE AND MUSEUM.—This was the palace of the Popes for 1000 years, from the time of Constantine to the return of the Pope from Avignon in 1377, when Gregory XI. transferred the papal residence to the Vatican. The pal-

ace, after being burned and rebuilt, was converted into a hospital in 1693, and in 1743 it was devoted to the purposes of a museum by Gregory XVI. We took a hasty view of this collection, which is chiefly the overflow of that of the Capitol, and of the Vatican.

St. Peter's.

How shall I attempt to describe the largest and most splendid temple ever constructed! The well known prints of St. Peter's, and its appendages, convey a correct idea of the external appearance and arrangement, but do not enable us to form any adequate conception of the interior. As you enter its vast paved court, your eye is arrested by the high Egyptian Obelisk, which was reared in this place by Michael Angelo, and by the two fountains, whose copious and splendid jets d'eau being projected 30 feet into the air, fall in the sunbeams like garlands of brilliants.

The façade and portico of St. Peter's, have been severely criticised on several accounts, especially because they intercept the view of the dome. These criticisms we leave to the architects. The façade is of travertine, 368 feet long, and 145 feet high.

The first impression, on entering St. Peter's, is that of disappointment, as regards its magnitude. Unlike the Pantheon, whose magnificent dome, one grand concave, the eye perceives and the mind appreciates at a glance, St. Peter's is divided by so many tiers of columns, so many side chapels, so many arches and minor domes, that it is only by frequent contemplation of its parts, and their relation to the whole, that we at length, obtain a conviction—more permanent, indeed, for having been produced step by step—that St. Peter's within, really fills the capacity of St. Peter's without.

The interior is beyond description, rich and magnificent. It is said to have cost 50,000,000 of dollars. The circumfer-

ence of each of the four great pillars which support the dome, is 234 feet. The diameter of the dome is 195 feet, the height of the dome to the lantern, is 405 feet, to the top of the cross, is 434 feet.*

The floor is composed entirely of marble of various colors, and disposed in ornamental forms; indeed the whole interior of the church, the columns and pilasters excepted, is faced with the most beautiful marble, highly polished; while numerous medallions, exquisite monuments, and splendid Mosaic copies of the best pictures adorn the interior, and form an integral part of its walls. The roof or ceiling, is stuccoed in sunken squares or panels, richly gilt. There is no part which is not sumptuously decorated. It seems as if ingenuity, art, taste, talent, and skill, all the resources of wealth, and of nature herself, through all her vast storehouse of materials, had been laid under contribution, to make St. Peter's the most glorious of the structures reared by man. With a pure faith, it is a temple worthy of the God who created all the materials with which it is built, and who furnished man with all the faculties, which have enabled him to rear and adorn this unrivalled structure, a fit abode, like the glorious fane of Jerusalem, for the habitation of the spiritual influence of Jehovah.

Here are interred the remains of many eminent persons. We carefully observed the Sarcophagus for Junius Bassus, prefect of Rome, who died A. D. 359; it is a very interesting monument of a Christian man, and contains many reliefs, illustrating Christian subjects; this Sarcophagus was made at Constantinople. Among the tombs of the Popes, is one for Adrian IV., (Nicholas Breakspeare), the only English Pope that ever occupied the Papal chair; he died in 1159. The last representatives of the house of Stewart, are here interred. In the inscriptions, they are styled James III., Charles III. and Henry IX., kings of England. In another part of the church, is a monument to their memory, on which we read the following inscription:

*See Appendix to Vol. II.

JACOBO III.
 JACOBI II., MAGNÆ BRIT. REGIS FILIO,
 CAROLO EDVARDO
 ET HENRICO, DECANO PATRUM
 CARDINALIUM,
 JACOBI III. FILIIS,
 REGIÆ STIRPIS STWARDLÆ POSTREMIS
 ANNO MDCCCXIX.,
 BEATI MORTUI QUI IN DOMINO MORIUNTUR.

Political feeling dies away when we are among the monuments of the dead, whose misfortunes lead us to unite in the benevolent wish—*Requiescant in Pace.*

St. Peter's was 176 years in building. Indeed, including all its vicissitudes, the period was 350 years, under 43 popes. It was finally dedicated by Urban VIII., November 18, 1626. The dome is double—a dome within a dome—and we ascend between the two. The bronze doors of the present St. Peter's are the same that were upon the old church. The term Basilica is applied to seven Roman churches. This word is derived from the ancient Romans, many of whose structures for the administration of justice (called Basilicas), were converted into places of Christian worship, and the old name was continued regardless of the new use. Within the walls of Rome are St. Peter's, St. John Lateran, Santa Maria Maggiore, and Santa Croce in Gerusalemme; beyond the walls are San Paolo, San Lorenzo, and San Sabastiano.

We were too late in Rome to witness the grand ceremonies of the holy week.

It has been remarked, that the vases for holding holy water serve to give an idea of the immensity of the building. They are supported by cherubs, which, on first entering the church, appear like children, but on approaching them they are found to be six feet high. Another illustration is derived from the Mosaic figures of the four Evangelists, with their emblems over the arches. The pen in the hand of St. Marc is six feet long. Upon the frieze running round the basis of the dome is this in-

scription, each letter of which is six feet long, and yet the writing is only conveniently legible below : TV ES PETRVS ET SVPER HANC PETRAM AEDIFICABO ECCLESIAM MEAM ET TIBI DABO CLAVES REGNI.

The ascent to the dome is at such an elevation that horses might take up their load without difficulty. On the walls of the staircase we read the names of the sovereigns of Europe who have made the ascent. During the siege of Rome by the French in 1849, St. Peter's was hit in eighty places by cannon balls. A dozen large holes were knocked in the roof, and nineteen balls were picked up by the attendants.

Nothing of modern art in Rome, and especially in St. Peter's, creates so much surprise in the mind of a stranger as the exuberant display of Mosaics.

We have visited the shops of the Vatican, and also of some of the most celebrated private Mosaic artists, and have seen them at their work. Like the Gobelin tapestry in Paris, the Mosaic of Rome is mysterious. We see, indeed, the wonderful result, we see also the materials as yet uncombined, and we see the artist lift the infinitesimal portions of colored glass, and place them side by side with their fellows, and still we are as far as ever from comprehending how his eye measures the shades, how his hand selects with precision the exact color which will answer his purpose, and how his mind can conceive of the picture in its new creation, and fix it there in beautiful perfection.

The pillars in St. Peter's are very numerous; they are usually monoliths, and frequently of great length and large diameter. They are of the most beautiful marbles, of Oriental and other varieties of granite, of porphyry and jasper, all exquisitely polished. Some are of bronze; such are those of the grand central altar, called the *Baldacchino*. These were made from the bronze torn from the roof of the Pantheon. They are of a twisted form, and of great height. The Duke of Torlonia, our banker, told us, as already mentioned, that there are 6000 ancient columns in Rome, and ancient statues without num

ber. The columns have been taken from old Roman buildings; and not a few of the statues have been disinterred from the ruins and rubbish of the city.

THE GROTTA VATICANA—SUBTERRANEAN CHAPEL.—Our ladies did not go with us into this mysterious region, as women are excluded, except by permission from a cardinal. They may however go on Whitsunday, but only four at a time. To this secret chapel we were conducted by the same young man who had previously exhibited to us the finger of St. Peter, so religiously preserved in its golden case, among other relics equally authentic and precious. The present Church of St. Peter's stands upon the site of the ancient church of the same name—over that portion which has been preserved. The tombs of the martyrs are beneath, and the floor, as it has never been disturbed, is the same that was there when they were interred. The accredited tomb of St. Peter is immediately below the altar. On another occasion, on the Janiculum Hill, in company with an American artist, I was shown the place of his crucifixion. He is usually represented as being crucified with his head down, which tradition says was his choice, because he had denied his Lord. There is a small temple built over the supposed place of his execution, a lamp, perpetually burning, is maintained there, and a monk is set to watch the sacred flame. While we were looking on, the lamp went out, and my companion, addressing the monk, exclaimed, "There, see, you have lost the sacred fire." The monk laughed heartily, while he proceeded to light again the extinguished lamp; and we concluded that he, at least, had little reverence for the mysteries of the place. With more devoted vigilance, they maintain a great number of lamps burning day and night under the *Baldacchino*, and surrounding the tomb of St. Peter. On the ground where St. Peter's now stands it is believed that many martyrs were sacrificed; and many saints are reported to be buried here. There are also several tombs of Popes. The place in which we now were, formed a large circuit, clean, decent, dark, and solemn, especially as it is seen only by lamp-light. It is a venerable

necropolis of the ancient dead ; where all narrow prejudices die away, and we feel that if it is not holy ground, it is still truly venerable, being clothed in the funeral robes of past Christian centuries, whose history and sufferings are the common property of the Christian world.

The Vatican.

The Vatican is situated very near to St. Peter's. It contains the richest collections of antiquities and things illustrative of man's history and his powers, and what he has done and suffered, that the world affords.

It is not the external splendor of the buildings that makes it remarkable. They consist of a number of hollow squares, built in different ages, without a common plan ; and there is nothing particularly grand in their appearance, except simply their extent. Collectively, they include a range of galleries and apartments, which, in a right line, would reach several miles. Although we visited the Vatican a number of times, we felt that we had seen only a part, and many things unsatisfactorily at last. It is said that the palace, with the gardens, covers a space as large as Turin, and that it contains twenty courts, over two hundred smaller staircases, besides the eight grand staircases ; while the number of its halls, chambers, and galleries almost exceeds belief. There are in it 4222 apartments.

PICTURES.—The Vatican is not so much distinguished by the number of its pictures as by their excellence. The Transfiguration, by Raphael, is alone glory enough for any museum. The same is true of the Last Communion of St. Jerome by Domenichino. These, together with the Madonna del Fulgigno of Raphael, are in one room. We lingered long with great satisfaction to gaze upon and admire them. The knowledge we had of them by numerous copies and prints only increased our curiosity and heightened our enjoyment in the contemplation

of the original. They are in perfect condition ; but I shall indulge in no remarks upon pictures that are so well known, and which are above all praise. There are also pictures here by Guido, Titian, and other eminent artists.

THE FRESCOES OF THE VATICAN are innumerable, and among them are the most masterly productions of the art which the world has ever seen. The Sistine Chapel, decorated by Michael Angelo, and the ancient state apartments of the Papal residence in the Vatican, known as the "Stanze of Raphael," are the most celebrated and in the best preservation. I will speak first briefly of some of the immortal works of Raphael. This gifted author was twenty-four years of age when he was invited, in the year 1508, to the Court of Pope Julius II., in order to decorate the principal apartments of the Vatican with the works of his pencil.

The Papal power had then reached its highest pitch of elevation, and had not received the check soon to follow from the struggles of the German Reformation. It had gained an extension of territory, and an increase of warlike resources more considerable than at any former period ; while its spiritual influence over the nations of Christendom was incalculable. To glorify this power—to represent Rome as the centre of spiritual culture, were the objects of the paintings in the Vatican. They cover the ceilings and walls of three chambers and a large saloon, which now bear the name of the "Stanze of Raphael." These paintings occupied Raphael during the whole of his residence in Rome, up to the time of his death, and were completed by his scholars. The chief subjects treated are—1, THEOLOGY, or the dispute concerning the Sacrament ; 2, PHILOSOPHY, or the School of Athens ; 3, POETRY, or the Parnassus ; 4, JURISPRUDENCE. These four occupy one room, called *Camena della Segnatura*, and embrace, as will be seen, subjects belonging to the domain of pure thought, and exhibit the most elevated tendencies of human nature. The second and third are the most beautiful. The School of Athens occupies one entire side of the hall, and represents the great teachers of philosophy, with their scholars, assembled in a noble atrium ; Plato

and Aristotle stand together in the centre, on a raised tribune, as if disputing together on their doctrines. Plato, the representative of speculative philosophy, points upward; while Aristotle stretches his outspread hand towards the earth, as the source of his practical philosophy. Socrates (counting on his fingers) explains to a group of listeners his principles and their conclusions. In the foreground we observe, on the left, surrounded by scholars, Pythagoras, who, as the head of arithmetic, writes upon his knee. On the right, Archimedes constructs a geometrical figure on a tablet lying on the ground. Next are Zoroaster and Ptolemy, as representatives of astronomy and geography, with celestial and terrestrial globes. On the steps, between the two groups, and apart from all, reclines Diogenes the Cynic. Near the group of Archimedes, close to the edge of the picture, Raphael himself enters the hall, accompanying his master Porugino; Archimedes is the portrait of Raphael's uncle, Bramante. The general arrangement and grouping of this picture is most masterly, and it is painted in a style most grand and free. Nothing can surpass the group of youths collected round Archimedes, and the impression of the whole picture even in its details is indelible.

The POETRY is a most pleasing, cheerful, graceful picture, if not so grand as the former. In the upper part is seen Apollo with the Muses, under laurel trees, on the heights of Parnassus. The poets of antiquity and of modern Italy are ranged on each side; among them, Horace recites verses, which a youth eagerly writes down; behind him are Virgil and Dante. Below, on each side of the window, which divides this picture, are two separate groups; on one side, Petrarch, Sappho, Corinna and others, are engaged in conversation; on the other, Pindar, bowed down with age, speaks with enthusiasm, while Horace and another Latin poet listen with reverential admiration.* No scholar can study this picture without a feeling of the most intense delight.

* Condensed from Kugler's *Schools of Painting in Italy*.

The department called the STANZA OF THE HELIODORUS, is so named after its principal picture. The ceiling, unfortunately much injured by damp, was divided by four compartments containing the promises of the Lord to the Patriarchs—i. e., the promise of God to Abraham of a numerous posterity; the Sacrifice of Isaac; Jacob's Dream; and Moses and the Burning Bush. The four large paintings on the wall refer to the Divine assistance granted to the Church against her foes, and the miraculous corroboration of her doctrines, with a special reference to her relations—ecclesiastical and political—at the period of her foundation.

Passing over the third apartment, called Stanza del Incendio, which is less interesting, we go to the Hall of Constantine, a large flat-roofed apartment, which really forms the entrance to the others. The works in this room were executed after Raphael's death by his pupils, and from his drawings, under the direction of Gulio Romano. The principal work is the Battle between Constantine and Maxentius, at the Ponte Molle, near Rome. It was executed by Gulio Romano, without change, from Raphael's designs, and is certainly one of his most important compositions, as it is also one of the largest pictures in existence. The figures are over size. The moment represented is the crisis of victory; the vanquished are driven to the banks of the Tiber; the Emperor, on horseback, at the head of his army, rides over the bodies of his prostrate foes. Figures of victory hover over his head. He raises his spear against Maxentius, now driven into the river, and contending with the waves. More distant on the right is seen the last struggle on the shore. Still deeper in the picture, the fugitives are pursued over the bridge. On the left, the battle still rages. The battle, the victory, the defeat, form a dramatic whole admirably developed, and calculated to produce the grandest impression. This picture is true to history. On this occasion the Tiber literally ran blood, and its waters were dammed by Roman corpses. It was near the Ponte Molle that Constantine had the vision of the

cross hung in the heavens, and bearing the inscription, "In hoc signo vinces."

The frescoes in the "Loggie of Raphael" are so much injured by damp, that a better idea may be formed of them from the etchings which have been published than from the works themselves in their present state. The so-called Loggie are open galleries built round three sides of the Court of St. Damaso, the vaulted ceilings of which are divided into numerous compartments, filled with an extensive series of events from Scripture, particularly from the Old Testament, often called Raphael's Bible. We recognized among these beautiful designs many which have become familiar among the standard religious illustrations of all Christendom.

SISTINE CHAPEL.—While Raphael was executing the great works we have just enumerated, Michael Angelo was engaged in decorating the walls and ceiling of the Sistine Chapel with those wonderful conceptions of his genius which have obtained for him the reputation of being the greatest artist of that greatest age of art. His compositions do not please at first sight, and it requires much study to understand and appreciate them. The ceiling is occupied with scenes from the Book of Genesis—the Creation, the fall of man and its consequences, and contains the most perfect works done by Michael Angelo in his long and active life. All attempts to personify the Eternal Father appear to me irreverent, and of course failures; and the Creating Spirit in the two first panels of this ceiling certainly forms no exception to this remark, although they are regarded by artists as the most competent of all similar attempts, and have been often copied. The **LAST JUDGMENT** of this great artist, on the end wall of the same chapel, was not undertaken until nearly thirty years after the ceiling was completed, and when he was in his 60th year (1541). It is sixty feet high, and thirty broad, and occupied him seven years in the execution. I shall not attempt a description of this great work, with its countless number of figures, nearly all quite nude. It appeared to us that the wrath, and not the mercy of God ruled in the conception of

the artist; and we turn from the convulsive struggles of the condemned with cruel demons, to look in vain for the glory of heaven, and for beings who bear the stamp of Divine holiness—every where is the expression of human passion and of human weakness—no joy, nor peace, nor blessedness are to be found even among the pardoned, who ascend to the regions of celestial bliss. (Kugler.) “*Dies iræ*” seems written all over the picture.

RAPHAEL'S TAPESTRIES, so well known from his celebrated cartoons (or original drawings in distemper colors, seven of which are in the Palace of Hampton Court, in England), were intended to adorn the Sistine Chapel, but are now preserved in a separate hall in the Vatican. They represent the lives of the Apostles, and were worked from his cartoons at Arras, in Flanders. These masterly productions, full of dignity, of grandeur and simplicity of form, and of dramatic effect, have, alas! lost much of their harmony of color from fading, and have also been badly repaired. The Miraculous Draught of Fishes, the Delivery of the Keys to Peter, the Healing of the Lame Man, the Death of Ananias, and the Stoning of Stephen, form the first series; while the Conversion of St. Paul, the Punishment of the Sorcerer Elymas, Paul and Barnabas at Lystra, the Preaching of Paul at Athens, and Paul in the Prison of Philippi, form the second series of this noble chapter of Scripture history.

THE GALLERY OF ANCIENT SEPULCHRAL MONUMENTS is extremely interesting. It is a long avenue within the walls of the Vatican, and is filled entirely with the records of the dead—the dead of centuries long past. From the tombs on the Appian Way, and from the sepulchres of the early Christians, a vast collection has been formed of ancient monumental inscriptions and devices, sculptured chiefly in marble, and often very rudely. On the left side of the gallery, in the direction in which you are conducted through it, are seen the inscriptions for the early Christians; on the right, those of the Pagans. There are more than 3000 of these monumental stones. They are merely marble tablets, frequently of irregular form, and attached to the walls; occasionally they are in the form of dis-

tinct busts, and more rarely of sarcophagi. The inscriptions on the Pagan monuments are not wanting in tenderness, but they are without that hope which cheers the Christian—a frequent termination on the monuments of the latter is “in pace.” The Pagan inscriptions are classified according to their profession, origin, and rank—from slaves and servants to deified heroes, emperors, and empresses. All the numerous servants and officers of Cæsar’s household form one division, magistrates another; citizens another, and so on. When we are among them, we feel that we are conversing with the ancient dead, and the effect on the mind is that of pensive and profitable contemplation.

ANTIQUÉ STATUARY.—In this department there is a vast collection—more extensive than at the Capitol; all are antiques. Often they are in remarkable preservation, and when found broken, they have been restored by reingrafting the detached member, or, if it were missing, adding a new one in harmony with the figure.

Many of the finest productions of ancient art are here. The perfection and lifelike airy character of the drapery is astonishing.

I will not repeat the remarks which I have made on this subject, in connection with the museum of the Capitol. It is impossible to wander, as we did repeatedly, among this host of figures, both draped and nude, without realizing that we are indeed among the ancient Romans; silent although they are, each has a characteristic position and manner, an action at least apparently incipient, and indicative of personal character. These figures have been found among the ruins of ancient Rome, or in villas, temples, and basilicas and baths of the olden time. The original Apollo de Belvidere, and the original group of Laocoon are here; the former was found in the ruins of the ancient Antium (Porto de Anzo, 38 miles from Rome); the latter stood, formerly, in the Baths of Titus. Both have separate tribunes for their exhibition. Pius VI. alone enriched the Vatican with more than 2000 statues.

THE EGYPTIAN MUSEUM.—This collection possesses a high

degree of interest. Most of the figures were found in the ruins of Hadrian's Villa. Among them, are ten sitting statues of Isis, in black basalt, some of which are polished in a high degree. There are cabinets of other Egyptian antiquities—mummies of cats and other animals, and vessels of bronze and porcelain. Some of the figures are in beautiful polished oriental granite. Admirable representations in marble, of the form and life of animals, are those known as the Greek, and I recall the remarks before made on the wonderful skill of the ancients, in the treatment of hard stones and flinty rocks, in the gems, in granite, jasper and porphyry.

In the circular hall of the Egyptian museum, there is a grand vase of porphyry, 44 feet in circumference, or nearly 15 in diameter. It was discovered in the Baths of Titus, and now stands on a celebrated Mosaic pavement, representing the head of Medusa, and the battle of the Centaurs and Lapithæ. This Mosaic was found in the ruins of Cicero's Villa, at Tusculum. But the most astonishing works in porphyry, probably in the world, and to which modern art can produce no parallel, are found in the hall of the Greek Cross.

They are the Sarcophagi of Constantia, the daughter of Constantine, and of his mother, the Empress St. Helena.

Both are in red porphyry, exquisitely polished. They are nearly cubical, and I suppose them to stand six feet high or more, including the pedestals, and five feet broad. Their sides are covered with figures cut in the solid porphyry, in relief so bold, that they stand out in perfect distinctness. You feel as if you could pick the bunches of grapes which adorn the vintage, represented on one : and you can actually span with your hand, the raised arms of the fighting warriors on the other ; you would think you could raise the fallen victims, or loose the bands from the manacled arms of the prisoners.

The Sarcophagus of Constantia which contained her ashes, was destined by Constantine to be deposited in a tomb, a circular building decorated with Mosaics, and constructed by him beyond the Porta Pia. This building was converted into the

church of St. Agnese. The Sarcophagus of St. Helena was taken by Anastasius IV., from the ruins of the Mausoleum constructed for its reception, by Constantine, beyond the Porta Maggiore; it was deposited by him in St. John Lateran, and removed by Pius VI. to the Vatican: probably the Sarcophagus of Constantia may have accompanied it, both in the first and second removal.

The granddaughter's Sarcophagus now stands by that of her grandmother, with only an alley between. I have seen no sculptures—considering the material—which have filled me with such astonishment, and with the sober delight afforded by a high attainment in art, especially in a substance which admits of no injury, unless from violent mutilation, and which may be as much admired ten thousand years hence as now, should the world endure so long.

The beautiful polish also given by the ancients, to red granite, usually called Oriental, is not in the least impaired in the Sphinxes of the Egyptian Hall, and in two colossal statues that adorn the doorway. We have also seen, in different collections, vases of porphyry and granite, four and five feet across; they always appear beautifully wrought, and are frequently adorned with gracefully figured bas-reliefs. These things remain to astonish and delight this recent age, while the hands that formed them have, many centuries ago, crumbled into dust, and their proud possessors have vanished from the earth.

ETRUSCAN ANTIQUITIES.—The Etruscans, a people of Oriental origin, occupied the fairest portions of Italy, in ages long before the founding of the Roman Empire. After bloody and protracted wars, they were subdued by the Romans, and the spoils, chiefly of their tombs, now grace many museums, and especially the Vatican. Pope Gregory XVI. collected this portion of the museum, which is shown only a short time each day, at 10 o'clock, A.M. A special permission had been obtained for us, by Mr. Cass, but we availed ourselves of an hour when it is open to the public. On this occasion, it was strictly watched by Swiss guards of the Pope, several of whom were

constantly present in each room, and every visitor was carefully but civilly looked after. These Etruscan remains are exceedingly rich and various, and prove a high state of advancement in the arts. Their vases are well known, as models of elegant and graceful forms; but it is not so well known that their mythologies serve as connecting links between the mythologies of Egypt, Greece and Rome.

Eleven chambers are occupied by these remains of a people, perhaps coeval with the early inhabitants of Egypt and Nineveh. The vases are numerous and beautiful. Among a great number of objects of interest, we saw sculptures of a high order of excellence; sepulchral urns, containing the ashes of the dead; the bronze frame or bier, on which the dead were borne to their tombs; a warrior in bronze, nearly of full size, and helmeted and mailed; a war-chariot of Roman times, this could contain only one warrior, and him standing; shields of bronze, one is pierced by a spear and its lining of wood and its leather braces are still perfect. We may add to these things, numerous domestic utensils.

THE JEWELRY is rich in gold and precious stones. The gems are set, as they were worn in rings, in bracelets, as brooches, as frontlets and wreaths, and some of them are of exquisite workmanship. The gold and silver filagrees of Genoa, the gold chains Venice and Trichinipoly, do not excel them in minuteness of execution, and rarely approach them in taste. The patterns of the female ornaments are exquisitely beautiful, and might be worn as novelties in any court of Europe. There are wreaths for the head, chaplets for the priests and magistrates, and bands for the female head-dress; some are fillets, while others are composed of leaves of myrtle and olive, most delicately wrought. The earrings are various, and some are set with jewels some are in gold only, and in the form of birds or other animals.

There are also necklaces and armlets of solid gold, in every variety of pattern; many are elastic, and most of them are in the form of a serpent, either extended or coiled. "The bullæ,

or amulets, worn on the breast, are of large size, and elaborately wrought. The fibulæ for fastening the toga, the chain for the neck, the gold lace, &c., are so beautiful, that modern skill can produce few specimens of equal delicacy."

There is an embossed plate of a warrior, large enough to cover the whole breast—it is of solid gold, with fibulæ elaborately wrought. There are also silver cups and vases, with figures in Egyptian relief.

Surely, it is wonderful that such treasures could repose in the tombs, without being plundered by the thieves of that day. Even in this age, and in Christian countries, they would not, if known, be safe for a single night; but they appear to have been held sacred among a people, who, as abundantly appears, by the idols preserved in this very collection, were Pagans.

There are, in these rooms, models of the Etruscan tombs, on the original scale. We were admitted into one, in which we saw paintings upon the walls, lamps and lachrymatories, and the order and position of the contents, as they were found.

THE LIBRARY ROOMS of the Vatican were the subjects of a distinct visit. They are in a gallery, or rather succession of galleries, which we were assured were three-fourths of a mile in length, and the main gallery is crossed by another at right angles. The gallery of the library has a very brilliant appearance, being very beautifully frescoed; but its effect is not derived from the books, which are shut out of view in cases, with opaque doors. We therefore saw nothing of them, nor of the ancient and valuable manuscripts, which are contained in a distinct room. At the time of our visit, this part of the Vatican was undergoing repairs.

VASES.—In the first room of the library, there were some beautiful objects of art. There was a magnificent vase or urn, four feet or more in height, made of the most superb Oriental alabaster (concretionary stalactite); the pictures presented by its natural lines and bands, with tints varying between white and delicate straw yellow, formed a beautiful object. It was presented to the Pope, by the Pacha of Egypt.

Such also, as regards intense beauty, was another vase of Sèvres porcelain, pictured with most elegant delineations, and zoned with cobalt blue, which is so perfect an imitation of lapis-lazuli, that it could not be distinguished from that princely mineral. This vase was a present from Louis Philippe to the Pope : both of the vases last mentioned are of very large size—I believe four or five feet in height.

The most extraordinary work of art, is a vase of malachite (green carbonate of copper), presented to the reigning Pope, by the Emperor of Russia, who, a few years since, made a visit to Rome. This vase is square, of a flattened form, and stands upon a pedestal of the same material. It is three feet four inches broad, and nearly of the same height, including the pedestal. As no single piece of malachite was ever discovered so large, and at the same time sound, we looked critically for joints. To an unpractised eye they are invisible, and only a person who is familiar with this most beautiful of the ores of copper, would be apt to discover the joinings. In fact, they can be distinguished only by their want of coincidence with the delicate curved lines, in which the concretionary layers of the malachite are arranged, and which with its rich green color of varying intensity, and its susceptibility of a fine polish, gives it the high degree of beauty which it possesses.

RELICS OF THE EARLY CHRISTIANS.—In the gallery which forms a cross with the library, are some of the most interesting things which the eye of a Christian can contemplate. They were obtained chiefly from the catacombs in and about Rome, and especially from those of St. Calixtus. They are glass vessels, ornaments of gold and ivory, often set with precious stones, lamps, paintings, &c., of the early ages of Christianity. In one of the cases are preserved instruments of torture, by which the early Christians were tormented when they suffered martyrdom. These instruments are horrid to contemplate, and such as, we should suppose, only demons from the infernal abode would employ. Among them were pincers, to be applied red hot to the body, and a kind of forceps, with sharp prongs, opening

and shutting so as to tear the flesh of the innocent victim. How could the vengeance of a just God slumber over such atrocities!

Among the elegant things which the early Christians possessed were vessels of amber, with reliefs, and Christian symbols, carvings in ivory, &c., which show that the converts were among the elegant and refined, as well as from people of common condition in life.

It is remarked very justly, that "they are interesting not only as objects of Christian art, but as illustrations of the religious feelings of the times. Some of them are symbolical of the consolations of Christianity in relation to death and sin. The histories of Moses and Jonas, and the miracles of the Saviour, are among the most remarkable subjects."

CAMEOS.—The beautiful ornaments which are now cut from shells, in imitation of the ancient Cameos, are familiar to all. We have visited the shops in Rome where these things are cut from modern turbinated shells, whose structure involves two distinct layers of color, white and buff.

It was, however, very interesting to us to see the ancient Cameos that were cut in the onyx agate. As time produces no impression upon them, they are, of course, in perfect preservation; as they came from the hands of the original artist, so they remain, and will abide, when all living beings on the earth shall have passed away. The collection here is very beautiful, although it is not large.*

I have named a few objects in the Vatican, but not a thousandth part.

The Vatican alone is well worth a voyage across the Atlantic, and if St. Peter's is added, the traveller will be well repaid. In both, every thing is exhibited with great liberality, and no other restrictions are imposed than those which the safety of the property requires. By proper applications, access can be obtained to all the rooms, and the visitor will feel that great

* At Naples we saw a far more extensive collection, which will be mentioned in due time.

intelligence and public spirit is manifested in these immense collections, and in the manner in which they are arranged and exhibited.

Church of St. Sebastian, and the Catacombs.

This church is without the walls, and it is named from the martyr, St. Sebastian, whose lacerated statue reposes before us pieced with arrows, thus illustrating the manner in which he was murdered.

This is a small church, but it is rendered painfully interesting by the Catacombs, the opening into which is beneath the building. They are called the Catacombs of St. Calisto, or Calixtus. It is believed that these Catacombs were originally excavated by the Romans, to obtain puzzolana. They are winding, intricate passages, real labyrinths, formed not only in branches, but in stories, of which there are three. They are continued underground, as is said, 20 miles to Ostia, the port of Rome at the mouth of the Tiber in one direction, and to Albano, 12 miles in another. In some places the excavations are in large chambers, which the traveller views with intense interest, as it is an undoubted fact that these gloomy recesses afforded an asylum to the ancient Christians for their derided and forbidden worship. Here they sympathized, and here they praised God, and prayed to him for protection against their cruel persecutors; resorting, as is said, in disguise, to the city in the day, and assembling here at night, for safety and worship. Some of these subterranean cavities seem to have been fitted up to a certain degree as chapels, and portions of stucco are found adhering to the walls. The oldest portrait of our Saviour was found in one of these subterranean chambers, as is supposed, and dates back to the third century.

Here also the early Christians found a refuge for their dead, and thousands were interred here in holy secrecy. As we wandered in these ancient solitudes, it was impossible to

suppress strong emotions (and who would wish to do it?) when we saw the empty graves dug into the sides of the caverns and galleries. It was easy to tell which way the body lay, as there was a place hollowed out for the head, for they appeared to have been buried generally without coffins, the indurated puzzolana forming a sufficient sarcophagus, and it was rare that any other was provided. The tomb was often closed by a marble slab with an inscription.

There were niches in the walls, which appear to have been intended for lamps.

Many of the marbles with inscriptions, which we saw in the Vatican, were taken from these graves, and along with them many of those interesting personal relics that have been already mentioned. Some of the graves have never been opened—the marble door is closed even with the side wall, and appears undisturbed.

We had a monk for our guide ;—he bore a light, while each of us was furnished with a candle, and thus we followed him in his devious wanderings. We, however, became willing to return before we had strayed too far ; for so numerous were the ramifications of these wonderful labyrinths that it seemed very possible to lose our way, although under the guidance of one who was familiar with the intricate windings of this mysterious cemetery. This feeling was not diminished when a door was pointed out to us—a door now closed and sealed—through which, no longer ago than 1837, a schoolmaster entered with ten or twelve of his scholars, and all were lost ; neither he nor his confiding pupils were ever heard of again ; they perished by a most miserable death, entombed alive, and their bodies were added to those which these catacombs still contain.

I must not omit to mention that our Ciceroni showed to us the little chapel of *Domine quo vadis*, a short distance from the Church of St. Sebastian. *Lord, where goest thou ?* is reported by tradition to be the question put by St. Peter to the Saviour, who met him at this place as he was going to Rome to sustain the courage of the apostle in the prospect of martyrdom. With

perfect gravity, Santé pointed out to us the deep and distinct imprint of the Saviour's foot in a piece of white marble! We are careful on such occasions to avoid any appearance of levity, and to read and hear the legends of Rome with due gravity.

Appian Way.

TOMB OF THE SCIPIOS.—This tomb is in a vineyard near to Rome. It was accidentally discovered about seventy years ago, in a subterranean recess on the Appian Way, in a place not unlike the catacombs, but the excavation was of limited extent. We descended into it by a door, as into a large cellar, and saw the niche in which was found the sarcophagus of Scipio Barbatus, grandfather of Scipio Africanus. It is of coarse, gray peperino; and is now in the Vatican. It is evident that the Scipio family intended that their retreat should never be discovered. There was no external structure to mark the place where this illustrious family lay; and twenty-one centuries rolled by, before the discovery was made. Six other sarcophagi were discovered in the same subterranean chamber. Scipio Africanus was however not interred here, but at Linternum, near Baïæ.

“The Scipios’ tomb contains no ashes now;
The very sepulchres are tenantless
Of their heroic dwellers.”

COLUMBARIA.—The Romans were not entirely forgetful of the memory of their slaves and freedmen. Their ashes were deposited in earthen urns, arranged in niches, like pigeon-holes, and therefore these repositories were called *Columbaria*. We entered three of these sepulchres, not far from the tombs of the Scipios. As they were in excellent order, I presume that they have not been disturbed, but only cleared of rubbish. One of them however was exactly in the condition in which it

was discovered. They were protected by an arched roof, and stairs descended into a square cavity in the earth, like a cellar. They were twenty or twenty-five feet deep, and perhaps forty feet square. The urns were arranged in the niches in rows, and in successive layers, and above each the name of the person was inscribed. In both situations I have lifted the lid of the urn and taken out a handful of the calcined bones of a fellow creature, interred perhaps 2000 years ago.

One of the large Columbarian cemeteries which we examined was devoted to the slaves of the Scipio family. I cast my eyes over the urns in the niches to ascertain their number, and believe that it approached 200. Those that remained in their places were in perfect order, as they were originally deposited.

There are many Columbaria in and about Rome; and it gives one a more favorable impression of the stern Roman heart, when we find that even their slaves were remembered—their calcined remains honored with the rites of sepulture, and their names preserved, not only over the funereal urn, but recorded also in those more durable inscriptions in marble, of which we saw many in the monumental galleries of the Vatican.

TOMBS ON THE APPIAN WAY.*—There are many tombs of distinguished persons in other places, but the *Via Appia* was the favorite region for sepulture. This great road, paved with large masses of lava, led from Rome to Pompeii, Herculaneum, Pozzuoli, and Brundisium, and is still in many places apparent, as at first, above the surface, or has been uncovered by removal of accumulated earth. Along this great artery of approach to Rome, as well as to other towns and cities to, or by which the Appian Way passed, the ancient Romans delighted to deposit the remains of their friends; and doubtless they regarded it as a religious duty to erect sepulchres for them, and to prepare their own, especially in this

*The Appian Way received its name from its founder *Appius Claudius*, 313 years before Christ.

beautiful part of the Campagna. For several miles from Rome, the Appian Way was on both sides a great street of the dead. We devoted a day—a day of intense interest—to this monumental avenue, which we followed out five or six miles from Rome, in delightful weather, with a brilliant sun, whose very beams seemed however a little softened by a funereal shading; for they had shone upon these mausoleums when they were new and fresh, and they now glanced over their ruins. Alas for the hope of immortality to the name of man from any structures which he can erect!

Except the single tomb of Cecilia Metella, all the rest are in ruins; and this tomb, partially despoiled, would have fared no better had it not served well for a fortress in several wars. The piles of ruins were not confined to the exact lines of the Appian Way. We clambered up several of these mounds of ruins, some of which were large and high, and directing the eye around the horizon in every direction, and often far from the road, tombs were always the most conspicuous objects in view. Often they were large structures, like small houses or temples, and were adorned with polished marble facings, and with statuary, sometimes allegorical, or representing the family, or the individual interred within. But all,—all, with the single exception* named above, are in ruins! Piles and heaps of ruins where, had barbarism withheld its sacrilegious hands, there would have remained, as at Pompeii, a beautiful and venerable street of the dead, rich in the most interesting and instructive monuments, and commemorative inscriptions, many of which have been, with their statuary, rescued from utter destruction, and preserved in the Vatican; but alas, with few exceptions, those who were interred in these tombs looked for no morning twilight to “dawn on the night of the grave;” or if they had any faith, it was reposed upon the gross and sensual fables of heathen mythology. The government, with a laud-

* I refer to those without the walls;—the tomb of Caius Cestus is within; and there are tombs under the Castle of St. Angelo.

able spirit, is now causing these ruins to be explored. They carefully collect all the fragments—all statues or fragments of statues—all funeral urns, and other objects of interest, to be preserved in Rome, or to be replaced in the restored tombs, when it is possible to reconstruct them, which however is rarely the case. The removal of rubbish has revealed the interior structure of many of the tombs. Not unfrequently the cinerary urns are found in place, as in the Columbaria or in the Sarcophagi. Occasionally, when the body was not burned, the bones remain. We saw, and handled, and brought away, some of them.

Among the inscriptions there are many memorials of affection, of parental, conjugal, filial, fraternal and sisterly love. There are carved heads in high relief; sometimes of a husband and wife, or of parents and children; all the family, apparently, being represented and named.

MAMERTINE PRISON.—This celebrated prison is at the foot of the Capitoline Hill, and very near to the Forum. It was evidently constructed for prisoners of state, and was a sepulchre for the living. It is as old as Rome, being of the age of the early kings. It is constructed of massive blocks of hewn peperino, has two chambers, an upper and a lower, and it is suspected that there are other apartments that have not yet been opened. Both the rooms now seen are roofed with large masses of stone, not in the form of an arch, but fitted to each other in a converging form, and clasped with iron, in the manner of the Etruscan structures. It is supposed to be as old as the times of the Etruscans. There is a small church over the whole, so that there are three stories in all. Through the church, where the people were at worship, we descended twenty-eight steps, to the upper chamber, which is thirty feet long, twenty-two broad, and fourteen high. The lower room is twenty-two feet in diameter, semicircular, and about six feet high.

In the upper prison we found the statues of St. Peter and St. Paul. These statues were incarcerated not only in the prison itself, but they were inclosed in a kind of cage, intended for a shrine, with bars in front, as in the shows of wild beasts. Levity

should have no place even where the overwrought legends have sought to augment religious feeling by taxing an amiable credulity, and sustaining the impressions by physical exhibitions. It is certainly enough to make one feel solemn to descend, as we now did, into the nether prison, where it is very possible that St. Paul may have been confined when under sentence of death, unless the ruthless tyrant, impulsive and violent as he was, ordered him to summary punishment. There is, however, no certainty that St. Paul was confined in this prison.

We read in an account which is not legendary, that "Paul dwelt two whole years in his own hired house (at Rome), and received all that came in unto him, preaching the kingdom of God, and teaching those things which concern the Lord Jesus Christ, with all confidence, no man forbidding him." And this corresponds with his first reception, when "he was suffered to dwell by himself, with a soldier that kept him." (Acts xxviii.) If St. Peter was ever in Rome, it is very possible that he, too, may have been in the Mamertine prison; although it is certainly not proved by his image in the shrine, nor even by the pillar of granite in the lower prison, with the two iron hooks still in them, which, it is asserted, held the two apostles; nor even by the fountain of water rising out of the solid rock, and which pilgrims believe that St. Peter evoked, like Moses of old, for the purpose of baptizing his fellow prisoners whom he had converted.

Surely there is in our holy faith enough that is spiritual to command all our confidence, and to sustain our warmest devotion, without these artificial helps from tradition or fiction, which unhappily still abound in Rome.

The lower prison is a horrible dungeon. There is a circular hole cut through its roof, by which it is, with good reason, believed that prisoners were let down into this dark, damp, and hopeless cavern, which Sallust describes as being "terrific, from the filth, the darkness, and the smell."

Whether the holy apostles were ever there or not, it is enough to fill one with horror to be in such a place, where, it is

believed, that Jugurtha, the Numidian king, was starved to death, and where the accomplices of Catiline, Lentulus, Cethegus, and others, were strangled.

The Mamertine appears to have been, in the early days of Rome, the only prison; and it was regarded as very remarkable that one prison was at that time sufficient. That this is indeed the prison of the ancient Romans, is proved by the following passage from Livy:—"Carcer, ad terrorem incrementis audaciæ, *media urbe, imminens foro, ædificatur.*" In another passage he distinctly alludes to the lower prison, when he mentions the execution of Quintus Pleminius: "*In inferiorem demissus carcerem est, necatusque.*"

Convent and Cemetery of the Capuchins.

Rome abounds in priests and monks, whom we meet every where in the streets—and probably the nuns are not less numerous, but we see their living sepulchres only on the outside, the inmates being secluded from view, as their prisons are inaccessible, especially to strangers. Not so with the monks; they are ever ready to confer with the traveller, and to admit him into their recesses, expecting from him, of course, a contribution to their community. The monks of the order of the Capuchins wear a coarse brown robe, loose, like a dressing gown, and secured by a rope around the waist.

They are shaven on the poll, unshaven on the chin, and generally go uncovered; as they walk freely abroad in the sun without any protection for the face, they are of a very dark complexion. Their straw beds are in little comfortless rooms, without furniture, unless it be a table, a chair, and a crucifix. They sleep in the coarse, brown woollen dress which they wear by day, and they wear no linen. They have a plain chapel, furnished with tombs, pictures, and relics; but two well cultivated gardens give an agreeable air to their otherwise cheer-

less abode. They have an apothecary and furnishing establishment, supplying both medicine to the sick and comfort to the well ; this department was neat, capacious, and in good order. The manners of the monks were quiet and mild, but most of them appeared vacant and listless, although we were assured that a few of them are learned men ; but whether beyond the lore of their order and of their church I know not.

That part of their establishment upon which they appeared to set the highest value, was their cemetery, and it was to see this that we were more particularly invited by our Cicerone. The cemetery is beneath the church, and having no idea of any thing more than tombs, and the usual decencies of a place of interment, we were struck with horror and disgust on entering a real charnel house—a Golgotha, indeed ! Here, in a succession of rooms, are preserved in full view all the bones of their predecessors ; and the monks now living expect to afford, in turn, their contribution to this palace of dry bones. When the brethren in succession die, they are at first buried in earth brought long ago, by the Crusaders, from Jerusalem, wrapped in the same coarse garments which they wore in life, and without a coffin. They say that in one year it brings the bodies to the condition of skeletons ; they are then exhumed, to make room for their successors, and their bones are placed in the general repository. Here they are disposed of in a manner to produce, not emotions of reverence and solemnity in the contemplation of the poor remains of humanity, but, on the contrary, feelings of disgust and offence. Some skeletons are preserved entire, in due connection of parts, and are laid out in the dress of the order—the grim and bony visage, with lipless mouth, naked teeth, and eyeless orbs being alone exposed to view. Other skeletons, in the same costume, are placed and sustained erect, bowing their brainless skulls, or looking—if their empty sockets can look—at the spectators.

But this is not the worst part of the arrangement. Excepting the skeletons just named, the bones of all the rest are dissevered from their natural position, and so assorted as to

have all of a kind together. There are long ranges of skulls; strings and ropes of vertebræ; columns of femurs and of the humerus, of tibias and fibulas; and not only so, but the smaller bones, such as the phalanges of the hand and foot, the ribs, the clavicles, the sternum, and occasionally some of the larger bones, are artistically arranged and disposed on the ceiling of the room in arabesque figures, and also along the columns and side walls in flowers and fanciful forms; some are hung in the form of lamps and chandeliers, so as to make them ornamental!

Strange morbid taste, springing from false views of life and duty, and from an institution appearing in direct opposition to the fundamental principles of human society, established by God himself in the first human family. But let us do justice to the monks. I am assured that these people, who, to the eye of an observer, appear like drones in the world, and a burden upon its resources, do indeed render some service in sickness and at funerals, and are ready for offices of humanity; but none of us are excused from these duties, which are entirely consistent with our social relations, and with that institution which is the source of all the good that exists in the world.

I must not omit to mention that in the chapel there are several pictures by celebrated artists—Christ in the Purple Robes, the Conversion of St. Paul, the Ecstasy of St. Francis, &c. The picture of the Archangel Michael and Lucifer, by Guido, interested us very much. It is well known by copies from it, which are not uncommon in America.

COLLEGIO DE PROPAGANDA FIDE.—This college was founded by Gregory XV., in 1622, "for the purpose of educating, as missionaries, young foreigners from infidel or heretical countries, who might afterwards return, and spread the Catholic faith among their own countrymen."

Feeling a desire to step within the walls of this celebrated institution, we called without introduction and sent in our cards. After some time, a young American from Philadelphia, known to us in Yale College, who is here receiving his education, came to us. Our ladies were permitted to enter, and we requested

permission to see the library, but the proper officer was absent, and we were courteously invited to call next day, which was, however, prevented by other engagements. The printing-office is furnished with a rich variety of oriental characters, and we regretted that we could not look more thoroughly into this institution, whose reputation is known throughout the wide world.

COLLEGIO DELLA SAPIENZA.—It was founded in 1244, by Innocent IV., as a school for the civil and canon law, and by subsequent Popes its plan has been enlarged, to comprehend other professional and scientific studies.

We had letters from Mr. John Taylor, of Liverpool, to several of the learned men of Rome, and among them to a professor of this institution. He was away from the city, but on calling and showing our cards we were very kindly received by two of the professors, and they showed us a fine apparatus in the department of physics, and a good collection in mineralogy and geology. In the zoological room, suspended overhead, there was a modern shark of 20 feet in length, in an excellent state of preservation, and the teeth were fully in view.

We were invited to repeat our call, but did not find the time, nor were we able to visit the Collegio Romano, as we had intended to do.

Other Memorials of Ancient Rome.

Beside the ruins and monuments already mentioned, we visited and examined with great interest numerous other memorials of ancient Rome, some of which deserve a passing notice. It is difficult to convey by description any adequate idea of the immensity of the great public places of ancient Rome—her palaces, and temples, circuses, theatres, and baths. The Baths of Diocletian have already been mentioned. Still more remarkable are the ruins of the Baths of Titus and of Caracalla. The former stand on the Esquiline

Hill, near the Coliseum and the Golden House of Nero, while the latter are outside of the walls, and on a scale of colossal grandeur and magnificence. Their very ruins are stupendous. From them have been rescued some of the noblest works of ancient art, as the Laocoon from those of Titus, as well as the precious frescoes, which gave to Raphael the hint he so well improved in decorating the Loggie of the Vatican. From the Baths of Caracalla came the Farnese Bull and Hercules, the Colossal Flora, the two Gladiators, the Venus Callipyge, the basaltic Baths of the Vatican, the granite basins of the Piazza Farnese, with bas-reliefs, cameos, bronzes, and minor works innumerable.

CIRCUS OF ROMULUS OR MAXENTIUS.—We rode out two miles into the country, on the road to the tomb of Cecilia Metella, outside of the Porto San Sebastiano, and were greatly delighted with our visit to this most interesting ruin. We walked leisurely over the now verdant and beautiful field which was once trodden by the hoofs of the flying horses, and cut by the wheels of the careering chariots. The name of Caracalla, as the founder of this Circus, has been set aside in consequence of three inscriptions brought to light by the excavations of the Duke of Bracciano in 1825. These inscriptions bore the name of Maxentius, and the most perfect of the inscriptions is placed over the great entrance. It records that the Circus was consecrated to Romulus, the son of Maxentius, A. D. 311. This is the most perfect circus whose ruins afford a subject of instructive study. The area is an oblong field, 1580 feet in length, by 260 in breadth. It is inclosed by a high wall of bricks and small stones, which is nearly entire—a circuit of more than half a mile. The large amphoræ, or hollow earthen jars, which the Romans inserted in the vault to diminish its weight, are still there. The seats within the wall for the spectators have fallen, and form a terrace all around.

A low ridge called a spina, runs longitudinally through the ground; it is still conspicuous, although depressed by time, and is believed to have been nearly 900 long, and 2 to 5 feet high;

on an eminence at each extremity stood the *metæ*, or bounds of the course, and the whole ridge was decorated with various works of art, among which an obelisk was conspicuous. So many things remain distinct and intelligible in this Circus, that the view of it was very satisfactory. There are the stables for the imperial horses, and houses for the carriages—the former, 200 to 250 in number; there are the goals from which the chariots were to start; there are the stations of observation for the emperor and the magistrates, for the judges, for the vestal virgins, for the musicians, for the extra charioteers to replace those who may be killed in the hazardous contest; and here is the vault, the receiving room for the dead—all remain nearly as they were left by those who last, in time, strove here for victory. Then add the double line of excited spectators in their elevated galleries, along the entire length of both sides of this beautiful field, terminated by the goal at which the winged chariots were to arrive, and by the arch of triumph through which the successful competitor passed to be crowned, after thrice compassing the field at the head of the whole array of twelve chariots, each flying with four horses. What a spectacle! and with what bursts of enthusiasm, and with what shouts of acclamation might it have been hailed by the applauding multitude!

THE PALACE OF THE CÆSARS.—The Palatine Hill, on which Romulus erected his straw hut,—the beginning of ancient Rome, and afterwards covered by the imperial palace of Augustus, and the golden palace of Nero, which looked down in its splendor upon the glories of the Roman Forum,—the Palatine Hill is now a scene of utter desolation. There is now no definite structure which can be called the Palace of the Cæsars. There are piles of ruins referable to different eras and emperors, and it is difficult to imagine a more complete annihilation of ancient grandeur. The greater part of the large hill of the Palatine, one mile and a half in circumference, has been swept with the besom of destruction.

Augustus erected the first palace on the site of the houses

of Cicero, Hortensius, and Claudius. He built, also, a temple of Apollo, and a library. Tiberius increased the palace, and Nero extended it towards the Coliseum, and after the great conflagration, Nero built his golden house upon the ruins of the former palace, and extended it to the Esquiline Hill, "displacing the house of Mæcenas, filling up the valley of the Coliseum, and covering with its grounds a great portion of the Celian."

"The soil on the Palatine is composed of fragments of masonry, and in many parts it covers the original surface to a depth of nearly twenty feet. The hill is portioned out into gardens and vineyards."

We made our approach from the Arch of Titus by the *Via Polveriera*. We passed by remains of arches and walls and vaults in ruins; some of the vaults retain their original stucco, and are decorated with beautiful arabesques and gilding. Driving around immense piles of ruins, and grand, massy walls, which still rise high above the low street in which we were riding, we arrived at the usual place of access; it is through a humble private house, and up a disagreeable, out-of-doors staircase, from the top of which we landed on the ruins of the so called Palace of the Cæsars. Stupendous, inaccessible walls towered still above us, but they are broken down in many places, and utterly despoiled of all their ornaments. You look around in vain even for a piece of marble out of which to carve a memorial of departed glory. You are, in fact, in a garden where flowers and culinary plants are cultivated above and upon the third story of the ancient palace, and still a fourth story and a basement lies buried along with the glory of the Cæsars in the earth below! You are on a high elevation, and look down upon the large area at the foot of the palace, where was once the Circus Maximus, the flying chariot careering beneath the imperial eye. The area of the Circus Maximus is now being filled up and levelled to form a cemetery for the Jews, who have already begun to bury their dead in this new abode, waiting, as they are, in hope for the restoration of

their long suffering people to Jerusalem, where every true-hearted Israelite sighs to lay his bones at the foot of the Mount of Olives, and in view of the place where once stood the glorious temple of Jehovah, now supplanted by the mosque of Omar.

FOUNTAIN AND GROTTO OF EGERIA.—Between the Ap-pian Way and the high road to Naples, there is a copious fountain, issuing from the foot of a high hill, and it is covered by a temple-grotto, which was once paved with serpentine,* and faced with marble. Tradition says that at this fountain and in the neighboring grove, Numa held converse, and took counsel with the nymph Egeria. However the identity of the place may be doubted, and the tradition regarded as a dream, the fountain and the accompanying scenery are very beautiful, and as it is but a short distance from Rome, and the fine hills and meadows are very attractive, the place is well worthy of a visit.

We wandered over these grounds and passed up the steep hill-side among grass and trees, and could hardly realize that a scene so perfectly rural, secluded and primitive in its simplicity, could exist a little out of the walls of Rome.

THE GREAT SEWER OF ROME—CLOACA MAXIMA.—This great work was accomplished by Tarquinius Priscus, the fifth king of Rome, within 150 years from the founding of the city, and it is still perfect as when it was built, although from neglect, the filth and rubbish have accumulated to the depth of 20 feet, and leave only a portion of the upper part of the arch visible.

We saw it at a place where it has been broken into in the middle of the city.

It appears now to be useless, although when it was first constructed, a cart loaded with hay might have been driven into it, and it then served to drain the waters of the marshes which existed between the Capitoline and Palatine hills. It is

* We observe that at Rome the ancient green porphyry is erroneously called serpentine by the Ciceronis.

2500 years since it was constructed, and if it were cleaned out it would be as useful as ever. It discharges into the Tiber just below the Ponte Rotto.

Palaces of the Modern Roman Princes.

Rome is not more remarkable for the dignity and magnitude of its ancient ruins, than for the number and splendor of its modern palaces.

It was equally impossible and unnecessary for us to visit them all, but we enjoyed the view of a considerable number, including the most interesting. Our party, or different members of it, were admitted to the *Barbarini*, the *Doria*, the *Colonna*, the *Borghese*, the *Corsini* and the *Albani palaces*; the latter is in the country, in the vicinity of Rome. These palaces are vast quadrangles, often including within their area and appendages, several acres of ground, and rising usually to six or seven stories in elevation.

They contain, in the greatest profusion and variety, specimens of all those beautiful, splendid, and grand objects of art, which have been so frequently mentioned, and to these private palaces, must we often look for the finest productions of the great masters in painting, in fresco, and in statuary. Raphael, Guido, Annibale Caracci, Domenichino, Gulio Romano, Canova, Poussin, Rubens, Tintoretto, Vandyke, Titian, Michael Angelo, and many other eminent artists, are conspicuous in these palaces by their fine productions. In them also, are some of the choicest ornaments of antiquity, which have been drawn from the Baths, the Catacombs, the Etruscan tombs, or other similar sources. The cost of these collections has been immense, and we are assured, that some of their possessors are, in fact, poor, in the midst of so much apparent wealth and real splendor; for their palaces bring them no income, but, on the contrary, a great and certain expenditure, for which there is no return, unless, as we are told is sometimes the case, the servants who ex-

hibit the rooms, pay over to the master, the gratuities given by visitors. Those among the princes, and there are some such, who have a vast income derived from real estate, can afford to possess such palaces.

Although on account of the great multitude of objects of art contained in them, I am inclined to pass them in silence, I am constrained to mention a few things.

THE BARBARINI PALACE, founded by Pope Urban VIII., and finished 1650, appears to be neglected. In its halls, it has not the neatness and finish usually seen in the palaces of this country, although the winding staircase and the lion upon the landing-place, are very fine; the lion is a bas-relief, and was found at Palestina. Many of the most interesting things once in this palace, have been removed to various collections; the Faun is at Munich, and the Portland Vase in the British Museum. The Fornarina of Raphael (his favorite lady) in this palace, is an undoubted production of his pencil, but is less beautiful than the Fornarina at Florence.

The Beatrice Cenci of Guido is here, which was our principal motive for visiting this palace; it is said that the picture was sketched the night before her execution, or as others say, from memory, when she was mounting the scaffold. The sad story of her fate need not be here repeated.

Suffice it to say, that the most authentic records, show that we may fully indulge not only all the admiration, but the sympathy for suffering innocence, which this beautiful and touching picture is so well adapted to excite. It is so strongly impressed upon my recollection, after seeing many copies, that the features, recur like those of a living person whom I have intimately known.

COLONNA PALACE.—This splendid palace we saw with much satisfaction. It has a grand picture gallery of 150 feet in length, the finest in Rome, but I shall not attempt the description of its contents, or of the statuary. The gardens behind the palace run up the slope of the Quirinal, and are remarkable for the pines and box.

THE BORGHESE PALACE was begun in 1590. There are 96 granite columns in the porticos. The gallery contains 700 paintings, and among them, several of a high order of merit. I will mention John the Baptist in the desert, by Paul Veronese, and the entombment of Christ, by Raphael; this historical picture was painted when he was only 24 years of age; it is full of deep pathos.

THE CORSINI is one of the handsomest palaces in Rome, and is situated in the Trastevere, near the Janiculum Hill. A double staircase of imposing architecture leads to the gallery, which contains some fine pictures. There is here a very beautiful antique curule chair of marble with bas-reliefs, and supposed to be Greek. The library contains over 1300 MSS. Behind the palace, on the crest of the Janiculum Hill, is the Corsini Villa, the prospect from which presents a complete panorama of Rome.

THE VILLA ALBINI.—We passed many hours in this rural villa. It is so rich and beautiful, and its objects of art are so numerous, that I cannot attempt to describe them. It is just out of Rome, and to its embellishment, the life and the means of Cardinal Albini were devoted, while he expended nothing in any other way, for his own gratification. The grounds are exquisitely beautiful, and the statuary and pictures are of a high order of merit. The French under Napoleon, plundered it of 294 pieces of sculpture, which were transported to Paris, and although the peace of 1815, restored them to Cardinal Albini, he could not afford to transport them back to Rome; they were then sold to the King of Bavaria, and went to Munich, excepting only the Antinous. Still, the palace now contains a vast collection. We walked through its splendid halls and galleries, and through its delightful grounds, tastefully laid out, and like the apartments of the villa itself, adorned with statues and busts, distributed among groves, shrubs, and flowers; we gazed at the numerous pictures which cover the walls of the apartments, and upon many curious objects of ancient and modern art, until we were wearied with gratification. I wan-

dered alone to the very last apartment in the long range of halls, and sitting down by myself upon a sofa, I could not but feel how forlorn is even an adorned palace, where there are no human sympathies, no social ties, and no communion but with the dead, and with the mute creations of art.

This villa lay out of the range of the republican shot in 1849, and was left uninjured, while the neighboring grounds of the prince Borghese were laid waste, as I have already stated. This was the more to be regretted, as they were always open to the public. The following inscription was placed on the pedestal of an ancient statue in the Borghese park :—*Quisquis es, si liber, legum compedes ne hic timeas. Ito quo voles, petito quod cupis, abito quando voles.*

This is in accordance with the liberal spirit every where manifested in Europe, and especially in Italy. The proprietors of these noble establishments, give free access, under reasonable regulations, to strangers as well as to fellow citizens or subjects, and there are always persons in attendance to exhibit and explain. There is no mutilation, or plundering, or defacing—an example which it would be more to our honor, if we fully emulated. Except the effects of political revolution and of war, we have seen no instance in Europe of a wanton invasion of public or private property, and of objects of art and taste.

MISCELLANEOUS.—*Protestant Worship*.—Our diplomatic resident, Mr. Cass, has succeeded in obtaining sufferance for American Protestant worship, in Rome, as an appendage of his embassy. We attended (as of old in Jerusalem, “in an upper chamber;”) the ministrations of the Rev. Mr. Hastings, an American clergyman, and it was very interesting to us to hear again in our own language Protestant preaching, and the living voice of prayer not in an unknown tongue. The audience was about 60, but it was the season when English and American strangers begin to withdraw from Rome, and we were assured that an audience of 200 is often assembled here. Mr. Hastings is a preacher of no ordinary power, and we were struck with his boldness in holding up, in a strong point of view, some

of those errors of the Church of Rome, which Protestants are wont to denounce.

I suppose that no hearers, except Americans and English, were present—but the bruit of his remarks might, perchance, float on the air, to the ear of the cardinals, or of the police. Indeed, after our return we heard that he had been silenced; but it seems to have been only for a season, as his service was renewed.

Rome to Naples.

May 15, 1851.

At noon we passed out of one of the ancient portals of Rome, with deep regret that the brief period allotted to the eternal city in our plan of travel was now brought to a conclusion. We had the satisfaction of feeling that our time had been most economically and industriously bestowed, and that we had accomplished much more than we had dared to hope. Our devoted guide Santé, followed us to the diligence office, and was most earnest in demonstrations of sorrow at our departure, humbly asking to be permitted to kiss our hands, in token of his devotion to our service and persons.

Passing the Church of St. John Lateran, we were again in the Campagna, beautiful in its desolation—with its monuments of gone-by splendor and power.

No feature of ancient Rome is more impressive than the ruins of the numerous aqueducts, whose arches still span this broad expanse of beautiful undulating land, and excite feelings of pensive association with ages and people that have passed away.

We were soon at Albano, 14 miles from Rome—on the ancient Monte Albano, so rich in classical associations. The town contains about 5000 people. Near by is the lake of the same name, once the crater of a volcano, whose lava flowed in a remote period almost to the gates of Rome. Several other extinct volcanoes, referable to the same period, encircled Rome,

and their compact lavas were extensively used by the Romans in architecture, and especially in forming pavements, as for example in the Via Sacra and Appian Way. Monte Albano rises 2048 feet above the level of the lake, whose waters were prevented from overflowing by a tunnel, wrought by the Romans, over a mile and a half through the tufa.

This was a favorite region with the ancient Roman nobles, and the modern nobility and magnates are not less partial to a country which is both picturesque and healthful. The Pope has a villa here.

ARICIA.—On rising the paved hill which leads into Aricia our six horses balked, and although the entire party descended from the vehicle, they refused to draw the empty coach up a hill not of very steep ascent, and we were detained more than an hour, while they sent back to Albano to obtain another team. In the mean time, several of the gentlemen of the party ascended into Aricia, which is about a mile from Albano, and is separated from it by a deep hollow, or valley, over which they are now constructing a viaduct, to save the ascent of the hill which embarrassed us.

We were now fairly out on the route of Horace's celebrated journey to Brundisium. From the appearance of Aricia, his first stage, we could not doubt that, had we called for it, this filthy and disagreeable walled town would have entertained us as it did him, "*hospitio modico*."*

Aricia, on the crown of the hill, one of the confederate towns of Latium, was once an important city, but it is now reduced to 1300 inhabitants. It has a splendid palace and church to which we in vain endeavored to obtain access, and we were so besieged by beggars, ragged adults, and filthy children, in filthy streets, that we were glad to retreat out of the gate, and to linger there until the arrival of our carriage.

From the Alban hills we enjoyed a grand panorama, stretching from the blue Mediterranean on the left, over the

* *Egressum magnâ me accepit Aricia Româ Hospitio modico.*

Campagna, with its numerous monuments, and colossal arches of broken aqueducts. Rome, with its walls, towers, and domes, like an oasis in the desert, formed the extreme right of the picture, extending to the Candidum Soracte.

From the hill of Aricia we looked down upon an extensive circular hollow, immediately at our feet, which appears to have been an ancient crater of great extent, and afterwards a lake, but it is now dry and presents a verdant bottom. Volcanic tufa, the peperino of Rome, was the prevailing rock, and of this the walls of Aricia are constructed. The tomb of Aruns, son of Porsenna, the Etrurian king, is in this vicinity; he was killed on the retreat of the Etruscan army from Rome.

VELLETRI.—We now passed six miles to Velletri, an inconsiderable place, where we did not stop. On our way we observed the large square tomb, believed to be the mausoleum of Pompey the Great, whose ashes were brought from Egypt and deposited here by Cornelia.* Soon we wound our way among high mountains, presenting, for many miles, very majestic scenery.

At CISTERNA, just at evening, we dined, poorly enough, in a disagreeable old house.

Night was now soon upon us, and we wooed sleep, regardless of the country through which we were travelling.

PONTINE MARSHES.—The moon shone out in all its brightness, as we passed over the long tract of the Pontine Marshes, and observed the deep and wide canals, which, with great expense, have been dug to drain them. This important enterprise, which engaged the attention of the Romans of old, has been pursued with zeal by the modern Popes, and the various governments of Italy, until the great object in view, the recovery of the drowned lands, and the improvement of the health of the country, has been attained, so that a large portion of this tract is now under cultivation. We passed through it without anxiety in regard to malaria.

* Plutarch says that the tomb of Pompey was near his Alban villa.

TERRACINA AND THE NEAPOLITAN BOUNDARY.—At one o'clock in the morning we stopped at Terracina to exchange carriages, and to have our passports viséed, as we were now to enter upon the territory of the King of Naples. This ceremony, with that of passing our baggage, took a little time, which seemed long, as we could obtain no refreshments, and were compelled to linger in a sorry tavern. When morning returned we were just coming out from among the mountains. Some of the more distant and more elevated peaks were clad with snow.

These mountains were in former years the favorite haunts of the bandits, whose freebooting habits rendered the Terracina road a terror to travellers. The almost universal use of letters of credit, in place of gold and silver, has greatly reduced the danger of such assaults, although they are far from being unknown even now. Our courier assured us that he and the English parties under his charge had been twice robbed, with pistols at their breasts, when travelling upon this road.

After morning returned, our progress was through a splendid country, in high cultivation, with groves of oranges, figs, and pomegranates in constant succession; and fields of wheat extended far and wide. In the afternoon, on our right, appeared the beautiful bay and town of Gaëta,* recently, and for a considerable time, the asylum of Pius IX., during the time when he feared to return to Rome.

We passed near to the place where Cicero was murdered by order of Mark Anthony. A monument was erected to his memory by his freedmen; and we supposed that a large conical pile near the road might be the one, but we had no means of ascertaining the certainty. We passed the river Garigliano on a suspension bridge, and soon after entered the large walled town of Capua, famous in the history of Italy, and intimately associated with the memory of Hannibal. His conquering army was enervated by the luxury of the ancient Capua, whose site was two miles from that of the present town.

* The Gaëta of classical antiquity.

Pursuing our journey by an inconsiderable village, and passing through a country perfectly beautiful, on account of its great fertility and high cultivation, we inferred our approach to the capital by the increase of travellers on the road, and by squadrons of cavalry and of artillery, which we met or overtook; the men being in full uniform, and mounted on powerful black horses.

Vesuvius, still many miles distant, soon appeared on our left in bold relief, both grand and beautiful, adorned by a delicate wreath of smoke, which rose gracefully out of its quiet crater, and floated away or dissolved in the air. This long-desired object continued to arrest our eyes, until, with daylight still full upon us, we drove into the splendid city of—

Naples.

May 16, 1851.

We rode along the shore of this celebrated bay, the first sight of which, with Vesuvius swelling above it, filled us with enthusiasm; and passing through the entire length of the graceful curve, we were landed in the court of the *Hôtel des Etrangers*, where, by the provident care of our courier, excellent apartments were awaiting our arrival. Our parlor windows open upon the bay, and overlook the public gardens in the *Strada Reale*.

The quiet rest of the ensuing Sabbath was grateful to us after the exciting scenes of Rome, which for a fortnight had left us little time for repose, amid the endless succession of interesting objects, whose claims to attention far exceeded our time, and overtasked our physical energies. We attended service at the chapel of the English Embassy, where we heard a good sermon, and saw a considerable congregation, mostly English, of whom large numbers are always in Naples.

Having dispatched our letters to America, posted up our journals, and been recruited from our fatigues, we were again ready

to resume our wonted activity; and, under the guidance of ANTONIO, our intelligent valet de place, to open the wonder-book of Naples. Vesuvius, Herculaneum, Pompeii, and the Bay of Baiae were, of course, the objects of our first attention and greatest interest—and, first of all, we drove to HERCULANEUM and POMPEII.

The tragic story of these buried towns is now familiar to all. The vivid romance of Bulwer has made us feel as if we had known the inhabitants, and almost as though we had been witnesses of the catastrophe. The story is recorded not more faithfully by the younger Pliny, in his celebrated letter to Tacitus, than it is plainly read in the material evidence, whose unexpected discovery, almost in our own day, has supplied both to the antiquarian and the geologist most valued and truthful evidences—contemporary records, expounding to the antiquary an interesting chapter of human history, filled with the minutest details of personal interest; and to the geologist, the close of one and the commencement of another of those great cycles of change, whose history, strangely connected in this instance with the vicissitudes of his own race, engrosses his delighted attention.

Our road to these ancient towns led us along the shore of the bay; and we passed in review the various districts of this motley town, whose successive quarters, each overlapping the other, render the ride of seven or eight miles along the water, one unending street. The stranger seeks in vain for a division line between Naples proper and Portici, its suburb, and needs to be told by his commissionaire when he has passed the boundary of one, and enters on the environs of the next. The noisy groups of *lazzaroni*; the discordant cries of the fish market; the jingling bells of gayly-harnessed horses, resplendent with a profusion of brass; the shouts of the piles of people who cling to all parts of some two-wheeled *volante*, drawn furiously along by one poor over-driven horse; the frightful dissonance of a donkey not three feet from your ear, asserting his independence; the clamor of countless and undistinguishable hordes of beggars,

whose plaintive tones and dreadful deformities move an unwilling compassion—all these, and many other things, addressing themselves at the same time to all the senses of the distracted stranger, quite overpower him. Such was our first impression of this "Beggars' Opera," with its pantomimic, serio-comic actors, and its strange orchestra of discordant sounds.

On the causeway, as we passed into Portici, we noticed among the statues of other saints that of Saint Januarius, with his arm raised in the direction of Vesuvius, to avert its lava currents from overwhelming the city, of which he is patron. We unbelieving, heretical Protestants, were not permitted to witness the miraculous liquefaction of his saintly blood, so religiously preserved in vials, with his head in a special chapel, while his body occupies another mausoleum in the cathedral.

At Portici we paused a few moments to see the palace of the Neapolitan king, who, since the revolution, takes good care to keep his sacred person at a respectful distance from his loyal subjects, in the Villa of Caserta, sixteen miles from Naples.

Several things worthy of notice exist in the halls of this quadrangular palace. One room was adorned with Naples porcelain—a sort of pottery no longer made here;—the walls and ceilings were lined with it, in tiles ornamented with various figures both raised and colored. A noble portrait of Napoleon in imperial robes, of his mother, Letitia, of his brother Joseph, and several of Murat, his brother-in-law, who was once king of Naples—serve to commemorate an era of Neapolitan history which, in contrast with the present wicked and contemptible dynasty, seems its golden age. Far the most interesting objects in this palace, however, are the memorials of Pompeii and Herculaneum, which are very numerous and perfect.

We passed rapidly through Portici, Resina, and Torre* del

*Torre del Greco, a town containing 18,000 people, was overwhelmed in 1794 by an eruption of lava from Vesuvius, flowing from the middle of its western slope, only five miles above the town. The melted torrent buried the place, and inundated the sea, encroaching upon it one-third of a square mile.

Greco, which form one long-continued street, lying over Herculaneum, a large city, whose entombed remains were far beneath our carriage wheels. Vesuvius was on our left, quiet and sublime. Clouds veiled its crater from our view, but its venerable sides were enveloped in the black drapery of its own lava floods. The currents have often flowed over the road on which we were travelling. Here and there, the lava had been cut through in the streets, and it protrudes in black rocky masses, upon which many of the houses have been erected. Lava formed the walls of the houses, and the fences around the fields, and lava, only lava, was every where around us. After a short interval of cultivated fields, we arrived in Torre del Annunziata, in a street similar to those we had passed, and surrounded by a country in the highest state of cultivation, where every foot of the rich volcanic soil is made available. Farm houses and villas appeared clustering around the eastern and southern foot of Vesuvius, and creeping up its sloping sides, so reckless are the people, of past catastrophes, although Herculaneum reposes in its profound grave, at the foot of the mountain, and the great sepulchre of Pompeii, with its funereal monuments, is in full view before them. They have also been very recently warned again, by the terrific eruption of February, 1850, which, bursting out back of Vesuvius, on the east, took an unwonted direction, thus giving another proof that no situation on or near the mountain is safe; but still the inhabitants repose in careless security.

APPROACH TO POMPEII.—As we drove slowly onward, checking the horses from time to time, in order to realize the scenes around us, Antonio, from the coach-box, suddenly exclaimed, "There is Pompeii!" We eagerly looked, and saw a low, green ridge of land, covered by grass and shrubs. It appeared as an extended mound, over which the traveller might have driven, as thousands have heedlessly done in centuries past, unconscious that a city of the dead slumbered beneath the hoofs of the horses. Only a few minutes elapsed, before standing erect in the carriages, we discerned the still naked heaps of

pumice that have been thrown out during the excavations; and immediately after, in breathless silence, we were at the door of the house of Diomede! An elegant country-house, a Roman villa, just outside of the walls of the city, still stands, almost 1800 years after the great catastrophe. Its columns are erect, its walls entire, and its open doors seem to invite the stranger to enter; but the family are not there, and silence reigns in the halls of Diomede!

I never before felt as I did when I entered this deserted house—pensive, solemn, and in full sympathy with the tragical story. Sentinels still keep these doors; not the helmeted Roman, who, firm and unmoved, surveyed the storm of fire but yielded not to fear, preferring to die at his post,* but Neapolitans stationed there by the government to prevent invasion of the ruins. One there was, a veteran, whose snowy hair, and visage so deeply marked by time, made us almost feel as if he must have been present when the volcanic tempest raged, and had, Salathiel-like, come down to our time to relate the events of those dreadful days. But a garrulous guide, who spoke tolerable English, gayly announced that he was a true Maccaroni, placed himself at the head of our party, and was our Cicero through an intensely interesting day. We mused for a few minutes in the vacant rooms of the house of Diomede, walked upon the still beautiful Mosaic pavements and floors, passed through the dormitories, the triclinium, the impluvium, and the hall for conversation; observed the water cistern, and the channels worn in the stone curb by the friction of the rope, and then descended to the vaults beneath, in which so many members of the family met their fate. This gallery is strongly arched with brick, and was used as a wine cellar, as appears from twenty-five amphoræ still remaining there, and which were found filled with volcanic matter.

On the 24th of August, in the year 79 of our own era, and

* In the Pompeiian Museum at Naples, we afterwards saw the skull of such a Roman, whose head was still covered by his helmet, and whose skeleton was found at his station in the gate of Pompeii.

not long after mid-day, Vesuvius broke the repose of untold ages, and resumed, with tragical energy, his ancient reign of fire, awakening the slumbering echoes of his power with terrible detonations and fearful earthquakes. A darkness that might be felt shrouded in the profoundest gloom the mid-day sun, and ashes fell like snow upon the mountain, the plain, the bays of Naples and Baiæ, and far into the surrounding country. Rain from the condensed steam of the eruption deluged the whole district; torrents of fluid mud, formed by the ashes and water, swept over every obstruction, and filled to overflowing every depression of the surface. The terrified inhabitants, overwhelmed by superstitious fears, joined the droves of domestic animals, whose keener instincts had already impelled them to desert a district filled with sulphureous vapors, and vibrating with ominous and unwonted sounds, wandering, they knew not where, in search of some place where the frightful evidences of the wrath of the gods might be avoided.

But the family of Diomedes sought refuge from the falling pumice under the strong arch of the wine-cellar, strong enough to resist and sustain the load of falling materials, but not proof against the deluge of volcanic mud, whose unexpected inundation brought death to the mistress, her children, and fifteen female slaves. The record of the manner of their death is, even now, perfectly legible. The form of the mistress, with her back and head to the wall, with outstretched arms, is clearly delineated by the difference of color. Surrounding her are the impressions of the persons of seventeen others, various in stature, but all standing, save one infant in arms. When these silent vaults were excavated, here stood the skeletons of these unfortunate people, the rich jewels of the mistress and of her daughter circling the bony fingers and wrists and neck. These we afterwards saw in the museum at Naples, the left humerus of the mother, as also the skull of the daughter, whose name, Julia, was engraved upon her bracelet. Equally strange and wonderful was it to see the cast of the bosom of this Roman matron, taken with lifelike precision, in the soft

and fluid tufa. Her hand still grasped the purse, whose contents are also among the wonderful treasures of the same museum. Beyond the garden and the fish-pond, which are contiguous to the wine-cellar, there is a gateway where were found two skeletons, with valuable vessels and money; one hand held a rusted key, and the other a bag with coin and cameos, and vessels of silver and bronze were near. These are believed to have been the remains of the master Diomede and his servant. A wrapper contained eighty pieces of silver money, ten of gold, and some bronze. It appears highly probable that, having left the family in a place which was believed to be safe, they were engaged in transporting valuables to a place of deposit, when they were overtaken by the same deluge which destroyed their friends.

The water line to which the fluid magma rose in this quadrangular vaulted gallery, is still visible upon the walls,* nearly even with several small apertures through which, as well as through the door, it probably flowed. It is not unlikely that this inundation was accompanied by torrents of carbonic acid and other noxious gases, so abundantly exhaled in more modern eruptions of Vesuvius, by which these refugees from the dangers above ground were perhaps so suddenly asphyxiated as to remain unmoved in the positions where they were found. The sudden death of the Elder Pliny, who, his nephew says, was suffocated by a noxious exhalation upon the same occasion, and at no great distance from Pompeii, may, with much probability, be ascribed to the same cause.

The facts now detailed clearly show that vast torrents of mud must have passed through the streets of Pompeii, since dry ashes and ejections of lapilli and pumice, unaided by water, could never have found their way into the interior of closed amphoræ, nor made perfect moulds of the human form, nor left a level water line upon the inner walls of close arched passages. The shower of materials which buried the city, was mainly

* Twelve to fifteen inches above the tallest head.

composed of small pieces of white pumice and rounded lapilli of various colors, interspersed with some large projected masses of rock, bombs, such as Vesuvius has often thrown out in later times. These by their fall broke through the roofs, and, at the places where they struck, depressed the Mosaic pavements into a concave form, as we saw in several of the houses. A darker colored sand appears to have alternated with the pumice, and often forms a distinct and thick layer upon it. Numerous such alternations have been made out by the Neapolitan geologists, and we afterward saw the same order of stratification distinctly in another part of the town, where fresh excavations were going on. The fresh section here showed that these loose materials fell much as snow falls in our northern climates when driven by the wind, being thicker in the angles than in the centres of the houses, and rising in curves corresponding to the elevations and depressions of the surface.

STREETS OF POMPEII. — The celebrated Appian Way passed by the house of Diomede, and through Pompeii to Stabiae. The road is now above ground, and is evidently as perfect as when Pompeii was buried. It is paved with large blocks of the ancient lava of Mt. Somma, which, of course, proves the occurrence of earlier eruptions of the volcano, although at an unknown era. Deep ruts are worn by the wheels in the solid lava, which is as firm as trap, while the stones are strongly marked by the rust of the iron worn off from the wheel-tires. The furrows prove that the wheels were not more than four feet apart. This is proved also by the position of the stepping-stones for crossing the streets, which were so placed that the wheels passed between them. The stepping stones were very large, and $2\frac{1}{2}$ or 3 feet long, their longest diameter coinciding with the direction of the street; and they were laid so near to each other that the passengers could pass quite across the street from one side-walk to the opposite, without stepping down. There were side-walks in the principal streets, about three feet wide, and two feet above the pavement. The streets were paved with the same hard lava rock, and in many places

it was worn into deep hollows by human feet, thus proving the high antiquity of the city. The street near the barracks is only 13 feet wide. We passed through one street in which the pavement was in very bad order; the ruts were worn irregularly and very deep, the stones were tilted out of the proper level, and there, as sometimes happens in modern cities, the street commissioners had evidently not done their duty.

Tombs.—The Appian Way, near to Pompeii, but outside of the walls and immediately contiguous to them, is, as at Rome, bordered on both sides by tombs, and in general they are in good condition, having been preserved during 17 centuries equally from injuries by the weather and by wanton violation. They are of marble, and their Latin inscriptions still commemorate their tenants. One tomb, constructed in the manner of the Columbaria, is dedicated to the gladiators, and is decorated with bas-reliefs representing their combats.

Near the tombs, and outside of the walls, we saw sheds for the horses of those who arrived after the gates of the city were closed. No stables have been discovered in the town, but skeletons of horses were found at this place, where there was a large tavern.

POMPEII was first discovered in 1748. It lies about twelve miles southeast from Naples. The town was extremely compact, and appears to have been only three-fourths of a mile long by half a mile wide. The houses were joined together. Twenty streets, which are only 15 feet wide, had been uncovered twenty years since. Although only one-third part of the city has been cleared of its covering, five or six hours were industriously employed by us, with our two guides, in visiting the most interesting private dwellings and the public buildings. We were indeed richly rewarded for our effort. Here we were, walking in the very streets and on the very pavements on which the ancient Romans trod; we were surveying the very houses in which they dwelt; we saw the vestibules, the impluvium (an interior and central receptacle for the rain-water from the roofs); their triclinia, or dining halls; their colonnades, surrounding

an interior open area, in which they walked and conversed with their families and friends; the fish ponds, also in an open area; the private marble baths; the kitchens and other arrangements for culinary purposes; the gardens in the rear of the houses, the halls and colonnades opening into the garden,—the whole forming a domestic dominion secure from public inspection. All these arrangements were perfectly intelligible to us, and as we walked from house to house it was not difficult to imagine that we were making calls, and that the people were not at home.

MOSAIC.—Every where, even in the smaller houses, the floors were adorned with Mosaic; many of the best designs have been sent to Naples, but, including what is still covered, much more remains in place, and not essentially injured. When it is considered that no melted lava flowed into Pompeii, but that it was covered solely by a volcanic shower of comminuted pumice and other pulverulent materials, which accumulated until the roofs were crushed inwards by the weight, it will be easily understood that the Mosaic floors may have remained for seventeen or eighteen hundred years, substantially uninjured.

The Mosaic of Pompeii is uncovered in many places, and when the dust is brushed away and the surface is wiped with a wet cloth, as was done for our gratification, all the original brightness and beauty of the figures shine forth, and in the finest patterns, the execution was in a high degree tasteful and elegant.

At the door of the mansion of the *Ædile Glaucus*, which was one of the largest and best in the city, there was, in the vestibule and before entering the house, a very startling Mosaic figure of a large and powerful dog, secured by a chain around his neck, but crouching and fierce, as if about to spring upon the visitor; and immediately before this vigilant sentinel, you read in large Roman letters, *CAVE CANEM*—beware of the dog! The inscription is preserved in the original place where we saw it, but the dog has been removed to the museum at Naples. It is still a perfect figure of a Roman dog.

THE FRESCOS of Pompeii and Herculaneum, have put us in possession of very perfect specimens of the skill of the Romans in the art of painting. The only examples of their pictorial talent previously known, were the comparatively imperfect decorations in the Baths of Titus at Rome. In these buried cities nearly all the walls of the houses are frescoed, and among these, have been found many superb specimens of ancient art. Most of the best have been removed to the museum of Naples, but some of considerable merit still remain in place, and no doubt further excavations will show numerous others now unknown. The colors are somewhat faded, but are bright when wet. The copies in water colors, sold at Naples, give very perfectly the idea of these frescoes, but with more brilliancy than is possessed by the original. Many of these figures are nude, although many are draped. We were particularly struck with the singularity of some of the nude volant figures on the walls, having *shoes* very much like our modern ones. As the great object of art is to present nature in her forms of greatest purity and grace, these nude figures cannot meet with more objections than their modern representatives. We saw nothing in Pompeii or Herculaneum, worthy of so much criticism in point of taste, as may be seen in almost any of the European galleries of modern painting. Titian's *Loves of the Gods* in Blenheim Palace, certainly surpass the ancients in this respect.

In Naples, there is in the Museo Barbonico a very elegant room finished entirely in the Pompeian style.

NEW EXCAVATIONS.—An expected visit of the Duke d'Aumale (son of Louis Philippe, and allied by marriage to the Royal family of Naples), has been made the occasion of an additional excavation, which is now being carried on by order of the king. We thought it rare good fortune, that we could stand by and see the moving of materials which had not been disturbed since the catastrophe. They are entirely unconsolidated, and are easily moved by the shovel. The accumulations did not appear to be more than ten feet above the tops of the houses, but if measured from the level of the streets, they might

have been twenty feet in thickness. In it were distinctly visible the alternation of fine pumice, coarse pumice, lapilli and dark colored sand, before mentioned.

We had the pleasure of seeing apartments that had been recently opened, and of going into several of them. In these, the pictures are fresh, and far less faded than in those that have been long exposed. In one of these houses, all the marble figures found around the impluvium, and colonnade, and fountain, have been allowed to remain intact, as the Romans left them, when they fled for their lives.

Around the fountain in one of these houses, there were numerous grotesque jets formed of marble, in the shape of miniature bulls, ducks and dolphins, and associated with them was a Bacchus. A leaden tube which formerly conveyed water for the fountain, remains in place as it passed through the wall. We observed, as illustrating the condition of the art of working this metal among the Romans, that the pipe was not drawn nor cast, but was made by folding up a sheet into the tubular form, and closing the joint by a lap without solder. In this house was a large vaulted music room, the walls of which are nearly perfect. The object for which the room was constructed, was sufficiently indicated by figures of musical instruments, and of persons playing upon them.

Columns were in general use in the better houses, around the included area, in the gardens, and in other places. In the best dwellings they are of polished marble, in many they are stuccoed. Some of the Roman houses, in their most perfect and uninjured condition, must have been very beautiful, although their accommodations were much more limited than those of modern times. The rooms,—the dormitories especially, were much smaller, and the houses were low, and rarely rose above two stories. They were so constructed as to admit of the most perfect domestic seclusion—no eye could scrutinize the family privacy from the street, or from another house.

Various names have been given to several of the larger and more beautiful houses in Pompeii, sometimes fanciful, but

more frequently from some statue, Mosaic, painting, or other distinctive work of art found in them, referring, as is sometimes supposed, to the owner. Thus we saw the houses of the Faun, of the Medusa, of the three Fountains, and those of Pansa, of Glaucus, of Sallust, and of Cicero. It is doubtful whether Cicero had a house at Pompeii, and still more doubtful whether the one called by his name had any connection with him.

The three fountains in the house of that name, are decorated with modern sea-shells, such as now abound in the Mediterranean, and in a style of patterns still prevalent in Naples. The fountains in the two houses newly exposed were very elegant, and in perfect condition.

THE FORUM was large and handsome, and surrounded with double rows of columns for a covered colonnade. In connection with it, was a temple of Jupiter, and another opposite to it, of Venus, both decorated with massive monolithic columns. Half-dressed blocks of marble and portions of columns lie on the ground in the Forum, where they were in process of preparation, to repair the injuries done to the building by the shocks of an earthquake, before the destructive eruption. Numerous dislocated and propped walls in the city bear testimony to the same event, which occurred in the year 63.

Connected with the Forum, was the Basilica or hall of justice, a structure adorned with columns, and provided with an elevated tribune for the Judges. Vaulted apartments beneath, were used as a prison, communicating by a circular opening in the crown of the arch, with the hall above. In this prison, which we entered, were found three skeletons of prisoners, ironed to the floor, doubtless waiting their examination at the time of the catastrophe, which so unexpectedly changed the venue of their trial to another bar!

Many acres are inclosed by the various structures of the Forum, whose very ruins, with their numerous columns, make a grand appearance. Among the ruins, are those of a temple to Æsculapius, one for Hercules, and another for Fortune.

Numerous monuments and inscriptions in Pompeii, indicate

the Greek origin of the original colony, and the Egyptian customs and society which preceded the Roman dynasty. The temple of Isis still shows its sacrificial altar, and inscriptions in Egyptian characters cover the columns. Some of the largest and most beautiful of the silver vessels in the museum at Naples, were found in this temple. Curiously enough, as we entered these ancient precincts, in which the serpent was held sacred, a snake, reputed by the guide as venomous, crossing our path, was made a victim, which we offered on the altar.

Beneath a superb portico in the street of the tombs, the skeletons of a female and several children were discovered; in the street near the temple of Isis, another skeleton was found at the depth of ten feet, and below it, a large collection of gold and silver medals in perfect preservation, chiefly of the reign of Domitian.

THE THEATRES, whose remains are distinct, are the comic, the tragic, and the amphitheatre. They were lined with polished marble, and were, in every way, highly finished and elegant. Of the two former, the entire plan and the greater part of the structure are visible, and most of the seats are in place.

The Amphitheatre was in a remote part of the city, near the eastern wall. It has undergone so little dilapidation, that it appears almost perfect. We approached it by ascending the ground until we were quite at the top, and we then descended by the stone seats, quite to the arena, which, by pacing, we found to be 240 feet by 120. From the arena we looked up over the entire circuit and elevation of the seats, which are almost perfectly preserved—thanks to the sepulture of 1700 years. Had this amphitheatre been in the midst of Naples, as the Coliseum was at Rome, it would, no doubt, have fared as ill at the hands of the architects. It was easy for us now to people it in imagination, with the thousands of Romans who have so often gazed and applauded from these seats, while blood, both brute and human, was flowing in the arena where we were standing. Such may have been the scenes when the tempest of fire broke

forth, for the people of Pompeii are said to have been then engaged in the amphitheatre.

PUBLIC BATHS.—There are two buildings for public baths, which are well preserved; the bronze seats and braziers still remain in them. For men, there was a common bath, circular and large enough for entire immersion; it is of marble, and is now in good condition. The dome, or ceiling, has in part fallen in, but the portion over the bath is preserved. We measured the room and found it to be 60 feet by 20. There was another bath for women, contiguous to this, but at a proper distance. This marble bath is quite perfect, and the room being entirely arched has been preserved uninjured. It is most interesting. There is a living fountain at one end, and there was an arrangement, whose object is even now quite apparent, for warming the room by hot air or steam. Here, in this ancient ladies' bath, we dined upon our stores brought out from Naples. Intruding upon this retreat, once so sacred, we seated ourselves quite conveniently, on the side of the bath, in a fine frescoed room of 60 feet by 16. This was the most perfect building that we saw in Pompeii.

FOUNTAIN AND RIVER.—In this vicinity, there is a living fountain still abundant, and the river Sarno runs at this moment beneath Pompeii. Through a wide opening we saw its copious and lively stream still flowing in its ancient channel, apparently undisturbed by volcanic and earthquake convulsions.

THE WALLS OF POMPEII are still in good condition; they were three miles* in circuit, from 18 to 20 feet high, and 20 feet thick. Seven gates have been discovered; the gate of Herculaneum, of Vesuvius, of Capua, of Nola, of Sarno, of Stabizæ, and of the theatres. The sites of nine towers have been ascertained. We ascended the wall by stairs of stone, doubtless coeval with the wall itself: the view was imposing. Vesuvius rose above the desolated city, looking down upon its naked walls and roofless houses. The volcanic mound still covers two-thirds of the city, and nothing on its upper surface tells of what lies below. It

* Implying a mile for the diameter of the city.

were greatly to be desired, that an enlightened and energetic government, with adequate means, would uncover the entire city, with its numerous hidden works of art and materials of history.

THE BAKER'S SHOP, with his oven of arched and modern form, the tub of stone in which he wet his broom, and the hour-glass-shaped mills of hard lava for grinding the grain,—we saw all perfect. There were mills of two sizes—one small, such as could be turned by hand, as when “two women were grinding at the mill,” and one much larger, and provided with square holes to receive the ends of levers, requiring, of course, much more force to turn them, and doubtless worked by men.

The shops of the wine and oil merchants were provided with large amphoræ set in masonry under the counter, for storing those fluids, and numerous other arrangements for the convenience of the occupants were visible.

GLASS.—In one house we saw a small circular window, in which part of the glass plate which originally filled it still remains. One other similar glass is said to have been found, although shutters were in general use for most of the windows. As there were no windows, as with us, opening upon the street, and all the doors and windows of the house opened upon private courts and gardens, there was in this mild and equable climate far less occasion for the use of glass than might seem at first requisite. That they understood the manufacture of glass, and how to color it, by the use of the oxides of cobalt and copper, is abundantly proved by the remains of this ancient art now in the Barbonico Museum, at Naples.

HOLLOW WALLS.—One peculiarity in the construction of the Pompeian houses favors the removal and preservation of the frescoes. The walls upon which the pictures are painted are not solid, but the frescoed surface is supported by studs of masonry or iron, at a distance of some four or five inches in front of the brick walls. Security from dampness is thus obtained, and the task of removing the valued surface much simplified and facilitated.

The declining sun still found us still lingering on the seats

of the amphitheatre, at the remotest angle of the city wall, dwelling with delight upon these memorials of the past, and speculating upon the probability of renewed activity in Vesuvius, whose quiet blue cone rose over our right shoulders crowned with a soft cloud of vapor. As we made a reluctant retreat to our carriage, we were moved both to pity and mirth by the grotesque figure of a quaint old man, almost nude, who made every effort to attract our attention by playing vigorously upon a sort of flageolet, and dancing with much gesticulation, with one lame leg, to the sound of his own music. It was late in the evening of this most interesting day when we reached the door of our hotel, long after darkness had hidden the landscape.

The Museum.

THE MUS.EO BORBONICO contains all the most choice and valued works of art and objects of interest which the excavations at Herculaneum and Pompeii have brought to light. To this we repaired on the day following our visit to Pompeii, to follow up our researches into the details of these most interesting discoveries.

Here we saw the golden ornaments found upon the skeletons in the house of Diomede, as before mentioned, and many others also. One pair of bracelets weighed a pound each. As for the workmanship, all that was said of the Etruscan golden ornaments is substantially true of the Pompeian. The ladies of these cities were certainly well provided with costly jewelry, both of pure gold and of the same metal set with precious stones. There was one ribbon of wrought gold. Ring stones and brooches without number are preserved here, and among the cameos in agate, are the largest as well as the smallest and most exquisite of these elaborate works of art ever found. Many of the latter can be appreciated only when examined under a strong magnifier.

UTENSILS in earthen ware are abundant, but porcelain seems to have been unknown to the Romans. Blown and moulded glass of various forms and colors, and designed for various uses, is also common. Pickle jars and olive jars, still retaining their preserved fruits in good condition, were found, and others contained cosmetics or colors. One elegant vase, of the color of lapis-luzuli, has figures in white enamel cut on its sides, reminding us of the celebrated Portland Vase.

The Romans seldom employed iron for culinary purposes, but almost every vessel of this description was fashioned from bronze. A very extensive collection is found in this Museum, reproducing nearly all our modern metallic vessels both of utility and ornament. They are generally elegant in form, and are often ornamented with artistic designs, especially in the attachment of the spouts, handles, feet or other prominent parts. They are generally also in a remarkable state of preservation, being for the most part merely covered by a thin coating of greenish rust, easily removed. Sometimes, however, they are corroded through and through with holes.

Among the bronze vessels in the collection is one showing that the Romans were well acquainted with the modern device of a heater to keep liquids hot in a large vessel. It is quite on the model of the coffee urn of our day. They also employed, as is evident, steam and hot water to keep dishes hot; for there is a very pretty affair in bronze, like a shallow pan, to hold water, set on legs, with a fire beneath, and provided with valves for the escape of steam.

Among the objects most frequently found in Pompeii are fishing nets and tackle, showing the habits of the people in this particular to be similar to those of the modern towns of the same coast, although now Pompeii is a mile from the sea.

The iron rings in the walls for fastening vessels were also found, and prove still more conclusively the accumulations in 1700 years. Two vases were discovered in Pompeii full of water; in one it was tasteless and limpid, and in the other brown and alkaline. Among the things preserved in the burial

cities were walnuts, chestnuts, almonds, dates, dried figs, prunes, corn, oil, peas, lentils, peas, and hams.

Papyri were found in large numbers, but the rolls were blackened, as were the timber and the corn, as vegetables are by inhumation in coal beds.

Beside the pickles, and olives, and roe of fish, already mentioned, we saw in a glass globe, in this part of the Museum, wheat, and barley also, blackened by age and dampness. The loaves of bread, bearing the baker's stamp, which were found in the shop already named, are singularly perfect, showing distinctly the lines of quartering in which the loaf was designed to be cut.

THE WORKS OF ART found in Herculaneum are in general much better than those from Pompeii, and every external sign proves it to have been a town of more refinement and wealth than its neighbor. Numerous statues in bronze and marble have been collected from these cities, and a large hall in the Museum is devoted to their exhibition. Many are mythological, but busts and statues of the several Emperors are also common. One bronze horse, considerably injured and corroded, has been found, and an admirable bronze Hercules.

THE CANDELABRA were numerous and elegant. One we observed fitted to take apart for the convenience of travelling; its sliding rod drops into a case or sheath, and the tripod foot folds together as snugly as the wing of a bird. A very beautiful candelabrum, taken from the house of Diomedes, has a basis formed of a small flat table of bronze standing upon feet. It is elegantly inlaid with silver in the form of a running vine and of leaves; some portions have been burnished, to give an idea of its original beauty. A perpendicular rod rises three feet in height, and supports a cross upon which are suspended four lamps. All the parts are preserved; and were this tasteful candelabrum put in order and burnished, it would be a fine form for our modern artists to copy, who, indeed, often profit by ancient models.

THE ROMAN STEELYARDS had a scale suspended so as to receive the thing to be weighed, and the weight slid, as with

us, upon a graduated beam ; in one the counterpoise is fashioned into an elegant female head. There is a collection of SURGICAL INSTRUMENTS, some of them very similar to those used at the present day. Iron probes, iron teeth extractors, elevators for the operation of trepanning, a cauterizing iron, lancets, catheters, amputating instruments, spatulas and obstetric forceps. Along with these things are rolls of the apothecary, ready to be divided into *pills*.

The articles of the toilet are abundant ; pins of ivory in large numbers and great variety for the hair ; combs, curling-tongs, boxes for perfumes and rouge, which is preserved in a small glass bottle ; mirrors of metal, small, but sufficient for a lady's face, and reflectors, to be used probably in a position to give seasonable notice of the approach of a visitor from the vestibule, similar to the arrangement now common in Holland and Germany.

Numerous small objects attracted our attention, among which were the ivory dice, and tickets of bone or ivory for admission to the theatre, marked and numbered. Musical instruments were common ; among them numerous flutes or flageolets, prepared from bone. Numerous bronze penates, truly *dii minores*, often less than a finger's length in height, some partly finished, are to be seen in the Museum at Naples.

I have already alluded to an apartment finished in the style of an ancient Roman house. This is in the extreme end of one of the long suites of rooms, in the Museo Barbonico. The sky blue panels have each, in the centre, a female figure, volant or quiet ; the upper part of the side walls, and of the dome, is divided into compartments, which are decorated by colored lines and forms of great beauty, the entire effect of which is charming. The eye delights to dwell upon them, and would never be tired, because the beauty, although exquisite, is simple and tasteful.

We saw in the museum as already mentioned the helmet and skull of the Roman sentinel found at his post in the city gate at Pompeii, with his short sword by his side ; there, too, was the complete armor of a Roman knight with a decorated and crested

helmet, with figures embossed upon the breast-plate, and the coverings of the arms and limbs. We must not forget the iron stocks for punishment. A bar of iron or bronze of great weight had metallic projections standing upwards, between which the feet were placed, and secured by a cross pin. It does not appear that the head was pinioned, as in modern times; but we could well understand how the feet of the Apostles were rendered lame by confinement in the Roman stocks.

The hall of ancient sculpture, chiefly from Pompeii and Herculaneum, with some figures from Rome, powerfully attracted our attention.

These sculptures, usually of full size, and sometimes colossal, are very fine. Excellent, many forms, and noble, elevated features of men, and of women, worthy of such companions, with great variety of characteristic attitude, and in general, in full costume, served to convey to us, as we may believe, a very perfect idea of the personal appearance of Roman citizens of that age. The family of *BALBUS* found in Herculaneum, is particularly interesting. It is composed of the father, a noble figure, the mother, equally impressive, and sons and daughters worthy of such parentage. Their features are calm and mild. It is a most interesting group, and in perfect preservation.

The moral and intellectual expression of the figures in these rooms—through a long series of apartments and a host of figures—is as various as that of living people.

THE FARNESIAN BULL.—It is convenient to introduce this inimitable piece of sculpture in this place, although it was not found interred in Pompeii or Herculaneum, but buried among the ruins of the Baths of Caracalla.

A large bull, of perfect and beautiful form, is rearing upon his hind legs, as if about to bound away in his course; but this he is prevented from doing, as he is powerfully held by the horns and the nose by two resolute athletic young men, one on each side, who have him in such durance that his massive neck is wrinkled in large folds, as he turns his head backward in his efforts to escape from their grasp. The cause of the struggle

becomes apparent, when we glance at a fine female form recumbent, and see that her abundant tresses are interwoven with the strands of a rope which is noosed around the horns of the bull, and it flashes at once on the mind, that should the maddened animal escape from his keepers, she will be quickly torn in pieces. Her noble sons have, in a critical moment, sprung forward to her rescue, and are just able to arrest her impending fate. Filial love proves to be stronger than disapprobation of an imputed fault, for which their mother was to have been immolated by this horrible death. In such a crisis we are not careful to balance the moral question—we instinctively applaud the filial piety, and do not ask for the spirit of Brutus. This wonderful group was sculptured out of a single block of marble of nine feet eight inches by thirteen feet, by Appollonius and Tauriscus, two artists in Greece, from which country it was brought, to grace the Baths of Caracalla. It is truly wonderful that such a ponderous mass, embracing so many figures, could be brought over seas, from a distant country, to Rome, and again be transported from that city to Naples, without injury, after being buried for fifteen centuries in the Baths of Caracalla.

Herculaneum.

The same eruption which destroyed Pompeii, Stabiae, Oplontia, and Teglunum, entombed Herculaneum also. Its site was, however, unknown, as well as that of the other buried towns; and the fatal event is only occasionally alluded to by the Roman writers.

Cuncta jacent flammis et tristi mersa favilla.—MARTIAL.

In the year 63, an earthquake had shattered these cities—a precursor of their coming doom. In 1711, a peasant, in digging a well, discovered, at twenty feet depth, pieces of colored marble. In 1713, the digging being continued, they struck down into a temple, and discovered the statues of Cleopatra and Her-

cules, and subsequent explorations disclosed the theatre. . Our time being very fully occupied with Pompeii on the day when we were there, we reserved to another opportunity a visit to Herculaneum. We descended quite conveniently down steps of stone, and arrived at the pit of the theatre, seventy-nine feet below the level of the main street of Portici, and Torre del Greco. With a guide, we proceeded, by the light of candles and torches, until we came to this subterranean theatre, which had been filled with volcanic materials. I do not call it lava, because there is every reason to believe that, like Pompeii, Herculaneum was buried by pumice, cinders, ashes, lapilli, and sand. There has been much discussion on this subject; but had the buildings of Herculaneum been inclosed in heated lava, it is obvious that every fresco painting and marble would have been destroyed, and much more, the numerous papyri and other substances of an organic character, which have been found there. Now it happens that the frescoes of Herculaneum, so far as it has been uncovered, are not only of a higher character in respect of art than those in Pompeii, but also in better preservation. The solidity of the material enveloping Herculaneum is easily understood, when we remember that it has been for over 1700 years under the enormous pressure of seventy or eighty feet of superincumbent rock. Since the catastrophe of August, A. D. 79, numerous flows of molten lava have passed over the site of Herculaneum; and these successive accumulations have amounted to the thickness just named. Add the effects of water, dissolving lime and silica, and infiltrating these materials among the loose pumice, and we see cause enough to account for the solidification of these loose materials. Moreover, no sluggish and semi-viscid lava (such as the Vesuvian lavas a short distance from their outlet always are), could ever have entered all the intricate passages of the theatre and other buildings, while a fluid magma of volcanic mud would act in the same situation just as it is now found, like plaster of Paris in a mould.

When we see with what labor and expense the excavations have been made in Herculaneum, and how difficult it is to dis-

pose of the materials, which must be borne a long way through narrow passages like the galleries of a mine, and raised nearly 100 feet to the surface, where a populous town forbids the accumulation of rubbish; we are the more easily reconciled to the suspension of the labor, and to the throwing of the fragments into cavities that had been previously excavated, and from which all interesting matters had been removed.

DISCOVERIES IN HERCULANEUM have been very numerous, but are so similar to those made in Pompèii that it is unnecessary to go much into detail beyond what has been already mentioned.

This city being, in fact, contemporary with Pompeii, we should, of course, expect to find great similarity. It would seem, however, to have been a grander city, and probably more populous. It has been computed that the theatre would contain 10,000 people, which would imply a large population. Two temples were discovered—one of them 150 feet by 60. This contained a statue of Jupiter. Opposite to this was another building of 228 feet by 132, supposed to have been constructed for the courts of justice. It had a colonnade supporting a portico; its pavement was of marble, its walls were frescoed, and there were bronze statues standing between the 42 columns that supported the roof.

THE THEATRE is now the only public place that can be seen in Herculaneum, and the excavations have brought its form very distinctly into view. Its marble seats and the pit have been so far cleared, that we distinctly comprehend the design and plan. The galleries of access from the streets, and some of the rooms that were appendages of the theatre, have been opened. It appears to have had two principal gates and seven entrances, called vomitories.

Many statues, and mosaics, and frescoes have been found in Herculaneum, and some of them, especially the statues, are of surpassing beauty.

We were desirous to see the famed impression of a mask, and by holding a candle near to it the form could be distinctly

seen. The impression is in concave, and is that of a strongly marked face of an adult; the copy is well defined, and corresponds perfectly with a moulding made by soft aqueous materials, and not at all to one made by lava.

THE WELL, by which the light was originally let down upon the theatre, of course attracted our attention. It is now enlarged into a pit of 15 to 20 feet in diameter, and narrowed towards the bottom to the size of a common well; it descends far below the bottom of the theatre, and, like other wells, contains water. A flood of light flows down through this orifice; and it is cheering to pass from the dark chambers of the theatre, to look up again upon the light of heaven. The subterranean walk, aided by candles, of which each person carries one, is, however, far from being unpleasant. Steps are cut in the solid mass, all obstacles are cleared away, and although we find it cool and damp, it is not gloomy, but it is in a high degree solemn and impressive. We are walking in an ancient tomb—the tomb of a buried city—a city which was large and populous. It was active with pleasure and business long before our Saviour was on earth, and it was overwhelmed while some of his Apostles were still alive. How different was our situation here and at Pompeii. In the latter city we walked the streets in open day and on the common level; here, we were deep down in a stony sepulchre, the mansions of the departed were all around us, but they were wrapped in solid rock. The rumbling of the carriages in the streets of another city, whose busy population was passing nearly 100 feet above our heads, was loud and incessant. It was an earthquake from above, and we could easily understand how the earthquake from below should so readily propagate its vibrations through many miles, or hundreds of miles, of solid materials.

Among the interesting places heretofore excavated, but now filled again, were the Basilica, the market, the scholæ, a Columbarium, and the so-called villa of Aristides, in which papyrus, bronzes, rare mosaics, and all things that attested to the wealth and taste of the proprietor were found. In excavations made

prior to 1728 they found the most splendid house of the ancients that had ever been seen by modern eyes.

A great work on Herculaneum was published by royal authority, in the 38 years intervening between 1754 and 1792, in nine folio volumes, including the pictures, lamps, bronzes, and candelabra; 738 pictures were named in the catalogue, and the other articles were proportionally numerous. The work was presented, by royal munificence, to the principal public libraries of Europe.

Both Herculaneum and Pompeii were mentioned with commendation by Cicero. Both appear to have been favorite residences of the opulent Romans; both towns were in the first class of provincial cities, and Herculaneum especially was adorned by many villas. They had all the public establishments that were usual in Rome. Indeed the entire circuit, from Cape Misenum around through the towns and villages of the Bay of Baiæ, and onward through Naples to Herculaneum, and Pompeii, and Stabiæ, appears to have been within the range of Roman sumptuousness, and a cherished resort for rural retirement from the eternal city.

PAPYRI.—The papyri of Pompeii are generally illegible, being penetrated by the pulverulent material, which, aided by water, had usurped the place of the vegetable matter, or assimilated it to coal; a portion of it was found to be soluble in naphtha. Those buried in Herculaneum were not penetrated by the enveloping matter; and the inscriptions, although black like tinder, could still be read, as writing can often be seen upon burnt paper. The papyri MSS. were generally written in Greek; a few are in Latin. There is much variety of chirography, and there are many erasures. Tickets were attached to the bundles, stating the title of the work. In a single villa in Herculaneum were found 1696 rolls of papyrus, of the 1800 thus far known. In 1819, 407 of the 1696 had been unrolled, of which only 88 were legible; 24 had been sent as presents to foreign princes; of the remaining 1265, only from 80 to 120 were in a state to promise any success, according to

the chemical method at that time recommended by Sir Humphrey Davy. The titles of 400 of those least injured, which have been read, although new are unimportant—music, rhetoric, and cookery being the chief subjects. There are two volumes of Epicurus on Nature, and there are other works by that school. The rolls, in their coiled condition, were scarcely a span long, and two or three inches thick; they were made of pieces of Egyptian papyrus, glued together; some of the rolls were, when extended, 40 or 50 feet long. The method found most successful for unrolling the papyri is to suspend them by silk cords in a glass case; and by attaching the delicate lining membrane of some species of bird to the back, with the aid of silken cords and regulated weights suspended by pulleys, gravity slowly unfolds the brittle tissue at a rate of almost inappreciable tardiness. We were permitted to see this curious process.

REMARKS.—As a traveller, no scenes of my life have ever interested me so much as those in which we have been for several weeks intensely engaged. We have been perusing the records of most important events—the history of individuals and their country—records not inscribed on paper, or parchment, or papyrus, but engraven in solid materials which still endure, despite of time and the elements, and even of the barbarism of war—records of a great nation now swept from the earth.

The classical studies of our youth make us more or less acquainted with the learning of the Romans, with their eloquent orators and historians, with their beautiful poetry, their rhetorical lore, their moral disquisitions and sentiments, and in no small degree with their domestic and social manners. But the resurrection of these cities from their forgotten tombs, has brought Roman life vividly before us in their family scenes, and at the period of their greatest power, and luxury, and glory. There is indeed much in them to approve and admire, and much that is worthy of imitation. Their defects and errors arose simply from a false religion; and although it is probable that their enlightened men did not believe in all the fables of their mythology, it is obvious that deities such as they

professed to worship could not have produced a good moral influence :—

“ Gods partial, vengeful, changeful, and unjust,
Whose attributes are rage, revenge, and lust;”

and the effect of such deities was but too plainly manifest in the national morals and in the productions of the fine arts.

Stabia.

A little further from Vesuvius than Pompeii, but in the same direction, was Stabiæ, which was covered at the same time with the other cities. The town of Castel del Mare is built over a portion of it. A part of Stabiæ was excavated, but has been covered again, so that at present there is nothing of it to be seen. Some manuscripts on papyrus were found there, as at Herculaneum, but very few skeletons have been discovered; it is probable that most of the inhabitants had time to make their escape. I have elsewhere alluded to the death of the elder Pliny, which happened here. As commander of the Roman fleet, he was stationed on the opposite side of the bay, at Cape Misenum; but the splendid outburst of Vesuvius, then novel, induced him, prompted by his humanity and zeal in natural science, to cross over with a few attendants; he approached too near, and was constrained to remain over night. Being corpulent and of an asthmatic habit, he was suffocated by the deadly gases exhaled in the volcanic tempest, which proved too much for his peculiar condition, and he died on the spot. The affecting and beautiful narrative written by his nephew, the younger Pliny, addressed to the historian Tacitus, is familiar to the readers of Roman literature, and can never be perused without a deep and painful interest.

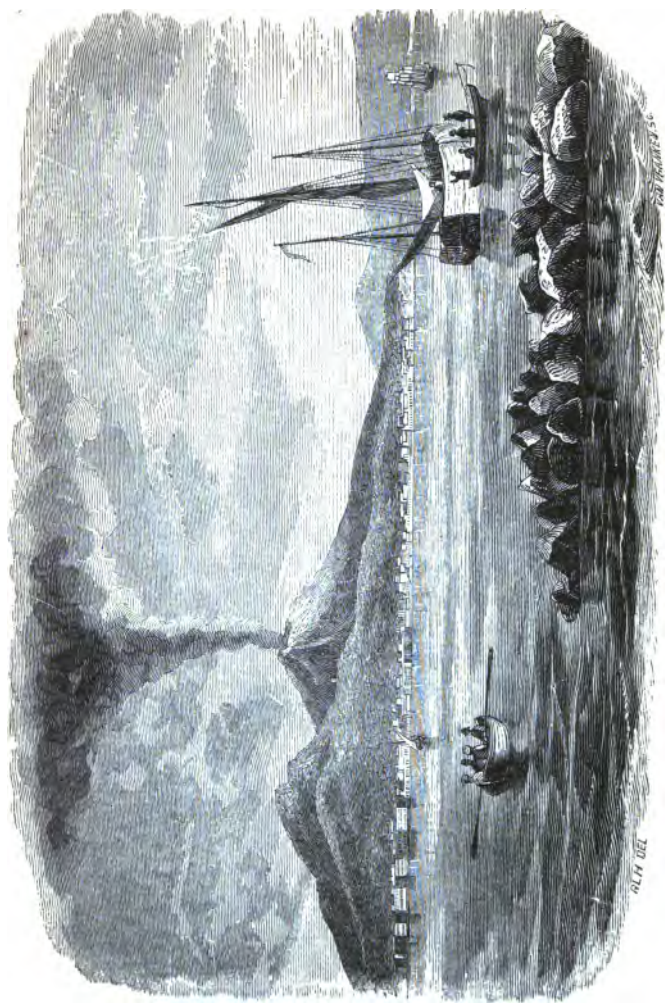
Vesuvius.

May 25, 1851.

To ascend Mount Vesuvius was a pleasure I had never expected to enjoy. I had most carefully studied its history, and watched its movements for fifty years, and was therefore fully prepared not only to understand its teachings, but to enjoy the gratification of seeing this classical volcano.

THE ROAD UP THE MOUNTAIN, from Resina to the Hermitage, is one of the few good things for which the traveller feels disposed to thank the Neapolitan King. It affords in its zig-zag course numerous sections in the accumulations of volcanic sand and tufa, which are spread in so many hillocks over the flanks of this mountain, sometimes 50 to 100 feet high. Soon after leaving the main road through the town of Resina, we made a turn to the left at right angles, and observed on both sides of the mountain road which we were now ascending, an immense ocean of lava, which, in 1774, deluged these fair fields and invaded the town. It lies in ragged, congealed billows, black and frowning, and very little decomposed during 77 years. It looks now as if ten times that period would not suffice to break it down and turn it into soil. The current seems to have descended from a fissure in the side of the mountain, now concealed by its blackened ruins; and we thought that it flowed through a deep gorge in the banks of loose materials, where the lava is still apparent, and then spread to a great width on the right and left.

VOLCANIC HILLS.—Leaving this vast flow of lava, we soon began to pass over the volcanic hills before mentioned, through which sections were made by the engineers in constructing this important work. The loose materials of these hills are piled upon the flanks of Vesuvius in masses, rising to the dignity of considerable hills, symmetrically shaped, and composed of lapilli, pumice, and volcanic sand, loosely aggregated



Mount Vesuvius.

as they fell from the crater. They enabled us to understand how such materials, aided by wind and floods of condensed steam, might easily entomb the buried towns which we had already studied.

The quantity of loose materials in these mountain-masses, did not surprise us so much as their almost uniform stratification. The arrangement in layers was so regular, and often delicate, that it compared well with known deposits from water. There was every variety between coarse gravelly pumice and fine sand and powder; there were also layers running obliquely, and curvatures and flexions, produced by local circumstances, occasionally sweeping away in dome-shaped curves, as if copying some hill beneath.

If we should imagine that mountain floods could have been concerned in forming these deposits, we must remember that they could only hurry along loose materials, throwing them here and there, without order, and leaving them in confusion—and rains would cut and furrow the masses, and transport the loosened substances further down the declivity. It would therefore appear that a degree of caution is required, as to attributing stratification, invariably, to water; and that matters ejected from volcanoes, either submarine or rising out of the water, and standing in it, may assume the stratified form from the joint agency of both causes. Speculations like these were entertained by some of us as we ascended to the hermitage.

OBSERVATORY.—The road which I have described, was constructed to reach an Observatory, built some seven years ago, upon the flanks of Vesuvius, by the King of Naples, at the suggestion of PROF. MELLONI, the most distinguished of all the Italian men of science. The object of the Observatory was to conduct experiments in meteorology, and especially in reference to the heat of the sun's rays. Prof. Mellon' superintended the construction of the Observatory, which was to be conducted under his superintendence, but falling under the suspicion of this most despotic king, as being possessed of republican tendencies, he was removed from his place in the University, and the completion

of the Observatory abandoned, so that it stands now a monument of the intolerance of the most detested of all living monarchs. Some of us have had most agreeable intercourse with Prof Melloni, who lives a short distance from Naples, amusing himself in his suspension of duty, by raising silk-worms and cultivating a large garden. His expulsion from the University deprived him of all instruments and means of research, and suspended the publication of his treatise on Heat, the first volume of which only has appeared. He married an English wife, and we urged them to seek, in England or America, an asylum where his wonderful researches might be resumed without the fear of royal edicts from a monarch, whose glory consists in disgracing his illustrious subjects.

OUR MOUNTAIN GUIDES were awaiting our arrival at the *Hermitage*, a stone house, not far from the Observatory, and more than half-way up the mountain. SALVATOR, a well known and experienced chief guide, had been engaged, and with his corps of assistants, was already on the ground, as well as a crowd of other guides seeking employment. Travellers leave their carriages here, and proceed to the foot of the cone, mounted upon horses and mules, which are kept at the *Hermitage* for their accommodation. Fortunately, we had nothing to do but to stand by and enjoy the scene, while François our courier, and Salvatore the guide, aided by Antonio the valet, fought the noisy battle of words with the rival guides. No people scold so loudly and vociferate so lustily, as the Italians of the lower class. The scene, while we were mounting, was one to be witnessed nowhere but in Italy. What with the obstreperous shouting of the men managing the animals, the contentions of rival guides, the angry words of our fiery courier, who laid about him with gesticulations which seemed almost blows, and our own shouts of laughter at the *melée*, the scene approached so nearly to a riot, that in any other country, we might have been properly arrested as disturbers of the peace. Finally, the contention ceased, and the eight men who were to carry the ladies set off, with their chairs mounted on poles. One man was appointed to

each gentleman of the party. Several more conveyed the provision baskets, and so we all got under way for the cone, twenty-seven persons all told. There is no necessity for so many attendants, but immemorial custom and the desire for gain, imparts a boldness to the demands made upon your patience and your purse, and it is of little use to resist the swarms of retainers that wish to follow the traveller.

RIDE TO THE CONE.—Behold us now, ladies included, all mounted on horses, with primitive saddles, bridles, and halters, and arranged single file, along the bridle path worn in the lava by innumerable hoofs; but the horses, sure of foot, from the effect of mountain training, carried us safely over a rough field of lava a mile and a half or more, to the foot of the precipitous ascent.

The height of Vesuvius from the foot* of the cone of cinders is about 1500 feet, but the steepness of the slope, and more than all, the loose and very sharp angular nature of the materials, make this ascent one of great labor, to those accustomed only to smooth walking. Here the zeal of the guides, who are familiar with the cone, and sometimes ascend it thrice in one day, was in advance of our activity.

In a few minutes the ladies, seated in rough arm-chairs fitted on poles, and sustained on stout shoulders, were seen climbing on proxy feet over the rough lava. In the mean time, our young gentlemen, with ardor not yet tempered by experience, though often cautioned by me to adopt the Latin rule, "*festina lente*," and to stop frequently, were seen panting with premature fatigue and short breathing.

For myself, adventures in mountains were not new to me, and although nearly fourteen years had elapsed since I last ascended a very high mountain, I had no hesitation in attempting the ascent of Vesuvius. Leaving my younger friends to take their own course, I selected a vigorous young mountaineer who buckled a strap over his shoulder, while I took hold of a loop fitted for one hand, and with the other I grasped an iron-shod pike. My mountaineer not being accustomed to modera-

* From base of the mountain, 3600 feet.

tion, proceeded at first so rapidly through the deep volcanic sand, that I soon began to pant, when Antonio made him understand that he must ascend very slowly, and stop whenever I gave the word.

I am thus particular, because it may be of use to others: the great secret of ascending mountains, is to proceed very slowly, and to *stop and sit down* frequently, until the natural quiet respiration and circulation of the blood and tone of the muscles are recovered; by proceeding in this manner, even high mountains may be scaled without exhaustion.

We at first ascended during three minutes, by the watch, and then rested for two minutes. Soon I began to gain, and usually went on four to five minutes, and rested on a block of lava one or two minutes; thus I economized my power, and found it increasing to the end. We soon left the line of volcanic sand and ashes, which form a distinct stream down the cone, and took to the rough pointed lava, most of which is in detached fragments, large and small. By placing our feet with care among these ragged masses, we usually obtained a firm foothold, and rarely slipped backward, although the angle of the slope of ascent was, I suppose, at least forty-five degrees.

The party were at the top in the usual time of an hour of very laborious effort. I was fifteen or twenty minutes later, but arrived fresh, and without exhaustion. We found **TWO NEW CRATERS** which were formed by the eruption of February, 1850, in place of the single one before existing. I hastened, aided by the guide, to look into them, as they were at that time quiet. The two craters are contiguous to each other, and cover in part the site of the old crater. The smaller one is easily accessible. Its lip is but a little elevated above the general surface of the top of the mountain, and we approached it without difficulty. The figure of this crater is that of a beautifully symmetrical inverted cone, three to four hundred feet deep. Smoke was rising from it; but it did not prevent our seeing the opposite side, which presented a brilliant bank of sulphur, of a bright yellow, inaccessible, owing to

the direction of the wind. The igneous action in this crater threw out large volumes of steam, mixed with sulphurous acid gas. This was what is usually called smoke. The wind eddying in the crater frequently cleared it of the cloud of steam, and we could see its elegant form perfectly. This crater is of about the size of that which crowned Vesuvius a few years ago; and had we seen nothing more, we should have been fully repaid for the toil of the ascent. But there was a still more interesting object very near;—a bank of about fifty feet in elevation, was all that separated us from the great crater.

This bank was very steep—not less than a slope of 45° —but with my son and Mr. B. for companions, and the strong arm of my guide for a support, I succeeded in reaching the summit. Here our feet sank almost ankle deep through a deceptive covering of black volcanic sand, and were immersed in a bed of sulphur, so hot as to be quite insupportable; we were indeed fearful that our boots would be crisped and burned, and our feet endangered, nor did we know to what depth we might sink in this glowing mound. It was, in fact, the lip of the large crater, and the boundary between it and the smaller one. We were, therefore, constrained to take very quick steps, but, being on the summit ridge, we had a glimpse of the horrid gulf of the great crater, in which the steam and sulphurous acid gas were eddying, and when the howling wind, or a volcanic heave, cleared the pit of its vapors, we were startled to find that we were standing upon a narrow lip, only a few feet wide, of the sulphurous abyss yawning below with the depth of a thousand feet. We now hastened down the bank. In addition to the annoyance from the heat, our friends were waiting for us to proceed with them to another position where the view was still more interesting.

Time on the summit of Vesuvius is precious, and we soon disposed of our hasty repast. Our dinner cloth was spread in the old crater, on lava, which, fifteen months before, was a glowing, melted mass, in vivid ignition, and although now cold to the touch, the atmosphere around was, by the vicinity

of the new craters, rendered gratefully warm, and counteracted the chill of the air that blew in gusts across the mountain top.

After passing through thick clouds of steam charged with the suffocating sulphurous acid gas which greatly annoyed our lungs, when the wind cleared our vision, we found ourselves on the narrow rim of the great crater. It was so narrow that only two persons could walk upon it abreast. Our present position was on the side of Vesuvius, contiguous to Somma on the north. At this place the descent of the exterior surface of the mountain was very steep—a rapid slope of cinders and loose lava, down to the deep and narrow valley (the Atrio del Cavallo), between Vesuvius and Somma—a descent on the slant of probably 1800 feet at an angle of 50 or 60 degrees. On the other side was the crater, whose angle of descent was not less. On this narrow rim, we walked on a surface not more than six or eight feet wide, with the terrific crater, 1000 feet deep, on one side, and the abrupt descent of 1800 feet on the other side, into the valley of Somma. It was a spectacle truly sublime, awfully grand and appalling. The heat below sent up, in throes and spasms, dense clouds of steam and sulphurous acid gas, which, at short intervals, filled the crater, and all that appeared was a pillar of a cloud, in which we were often involved, and half suffocated; we stood with arms locked, for then it was unsafe to move until a whirlwind swept the crater clear, and we could see distinctly into its profound abyss.

Nothing could be more perfectly formed than this crater. It was a magnificent hollow cone, whose nether apex opened into the great world of fire below; still the fire we did not see, although we had the most decisive proof of its existence and continued action in the violent ejection of steam and gas, filling every few minutes this vast funnel, whose diameter across from side to side was probably 1000 feet; but the dense cloud of steam and noxious gas which hovered to leeward over a large portion of the circular orifice, rendered it impossible to walk around it, or even to ascertain whether a continuity of surface,

free from cross fractures and chasms, would render it practicable without the most imminent danger.

In the night, we presume the fire would have been visible at the bottom of the cone, although none was now seen; and we were glad to dispense with a more vigorous action of fire, that we might enjoy so rare an opportunity of inspecting, through its entire depth, a crater so profound and one of so recent an origin. As we descended from the mountain just before evening, we met a party, and among them several ladies, who were ascending with the intention of passing the night on the summit, to explore, if possible, the slumbering fires, and to see the sun rise the next morning on the mountain top. We afterwards learned from the guides that they suffered much from cold without seeing the volcanic light. Both this and the smaller crater were formed entirely by the violent eruption of February, 1850; and had the action now been as intense as it was then, we could not safely have approached the crater, whose fiery ejections on that occasion proved fatal to four persons standing at some distance. A soldier of the Mountain Guard, a German traveller, an artist who was making sketches, and Lieutenant Bayard, of the American navy, all approaching too near, lost their lives. Lieutenant Bayard's arm was shattered by the fall of a volcanic stone, and he died a few days after in Naples, of exhaustion, chiefly by the loss of blood.

The interior of the great crater appeared to be composed of stratified volcanic beds, resembling solid lava rocks, arranged in a rude stratification. There were tempting deposits of yellow sulphur, green chloride of copper, sal-ammoniac and other substances, on the walls of the crater. One of our party was much disposed to adventure in too far to obtain specimens, and was not easily dissuaded from so perilous an attempt; a slip of the foot would have been fatal.

By throwing large stones into the crater, we made several rough measurements of its probable depth inferred from the time consumed in the returning sound, and we judged in this

way that the depth of the crater was from 1000 to 1100 feet.

THE ERUPTION OF FEBRUARY, 1850, took place from the base of the cone, on a level with the sand plain which fills the ancient crater of Somma. It here poured out a torrent of red scoriaceous lava through a well defined canal. This is now entirely cold, and we collected from its sides specimens of apthitalite,* which was projected over the rugged cavern like snow. Near this spot also are two fumeroles, formed during the last eruption. The largest was about twenty-five feet high, with an aperture of nearly ten feet. Its outer walls were black, rugged, and forbidding. The flow of lava from the eruption of 1850, was in the direction northeast of the ancient Pompeii; and it was copious enough to destroy a small village, with its vineyards, at the distance of several miles. The king of Naples, much to his honor, has since erected a new village for the unfortunate inhabitants near the site of the former one.

VIEWS FROM VESUVIUS.—From the eastern lip of the large crater, the site of Pompeii appears almost at the foot of the mountain, and it seems not surprising that it was overwhelmed.

There is enough of Pompeii uncovered to give it the appearance, from Vesuvius, of a great cemetery; thus it makes, in this aspect, a solemn impression on the mind. From the other side of the mountain, the towns that now cover Herculaneum seem within the reach of ordinary eruptions; and we can only wonder that in modern times, since Vesuvius has been known as a volcano, men should have had the hardihood to build at the foot or upon the sides of a mountain of fire. Turning towards Naples, the prospect is, beyond conception, grand and beautiful. On the left, the Calabrian Mountains rise from the water's edge at the Gulf of Salerno, and extend away far inland, until they are lost to the view. The mountains on the eastern side of the bay are grand from their height, and beautiful in their form,

* A mineral containing sulphate of potash, with smaller portions of sulphate of soda, common salt, sal-ammoniac, and a little copper and iron.

which is in sweeping curves, with verdant sides, descending toward the sea. Before us was the splendid bay, checkered with fishing boats and sailing vessels, and in the distance the blue Mediterranean. On the right are Cape Misenum, the Bay of Baiæ, and the city of Naples, with the picturesque hills in its vicinity. Before us, and at our feet, are Portici, Resina, Torre del Greco, and Torre del Annunciata, forming a brilliant border of many miles along the strand. All objects are resplendent in the bright skies of this fine climate. Before us also, in the distance, are the islands; Capri on the left, and Ischia and Procida on the right, bathed, as we saw them, in the golden purple light of an Italian evening.

DESCENT TO THE VALLEY OF SOMMA.—Our younger gentlemen being desirous of viewing the scene of this eruption, descended the steep slope, where it would have been impossible to ascend. They sank, knee-deep, in the loose beds of volcanic sand and lapilli, and were glad to avail themselves of a zig-zag course, in order to check the velocity of their descent: they were in danger of pitching headlong, with their limbs still entangled in the debris, while it required active vigilance to avoid the stones set in motion by the party, in their descent. Arrived in 15 minutes at the bottom, and without injury, they felt themselves compensated by perusing the record of the most recent eruption. The rest of the party made their descent by the usual route, and in a very short time arrived safely at the bottom of the cone, without accident, and our friends, equally fortunate, soon joined us at the rendezvous of the horses, where the patient animals had remained tied to masses of lava.

Views of Vesuvius are familiar to most persons; they frequently exhibit the wall of the old crater of Somma, rising abruptly like a parapet, or a section of an amphitheatre, and inclosing Vesuvius on the north and northwest;—a valley lies between them, filled with volcanic ruins. We crossed without difficulty, from the foot of Vesuvius to the wall of Somma, at a distance of one-fourth or one-third of a mile.

The intervening plain (if a tract could be so called which was every where billowy with old congealed lava) was filled, more or less, in all its hollows, with volcanic sand. Our riding required care, as there were numerous holes and horse traps; but no accident occurred, and we coasted along at the foot of this grand old volcanic wall. The instruction which it affords is very interesting. The dikes, that is, the distinct walls of solid rock (standing out like buttresses in a building), by which this ancient volcanic barrier is divided, are very numerous; thus proving that it was much convulsed and fissured after its consolidation, and that melted lava was then injected, and in its turn congealed. There are dikes here intersecting other dikes that run aslant between the great dike walls, which are generally vertical or nearly so; all this proves that the convulsions and the injections were repeated in successive eras, and that the fissures crossing masses previously solidified, were, of course, more recent, and that in successive periods, they ran in many different directions. The dikes being firmer than the lava walls the latter have been worn away by the weather, and left the dikes prominent and projecting. This scene, of which I had often studied the descriptions, was perfectly intelligible, and, to a geologist, highly instructive and gratifying.

LAVA AND MINERALS OF VESUVIUS.—The lava of Vesuvius is mainly basaltic or augitic, and its flow is represented as very sluggish at a small distance from its point of issue. Sir William Hamilton, however, describes that which he saw in the eruption of 1789, as issuing from the orifice on the side of the volcano, where it found vent, with amazing velocity, very fluid, and having the appearance and color of clear honey. It soon, however, became viscid at no great distance from the issue. Medals of lava formed by compressing the semifluid material in moulds, bearing the date of the eruption, are sold by the guides. Numerous crystals of leucite, are found in the lava of Vesuvius, and this mineral being much less fusible than the lava, it often happens in the violent ejections of steam and vapor accompanying eruptions, that numerous small crystals of leucite are blown

out, and fall like hail upon the surrounding country. Prof. Sacchi showed us in the mineralogical museum at Naples, many crystals which the eruption of 1850 threw out in this way.

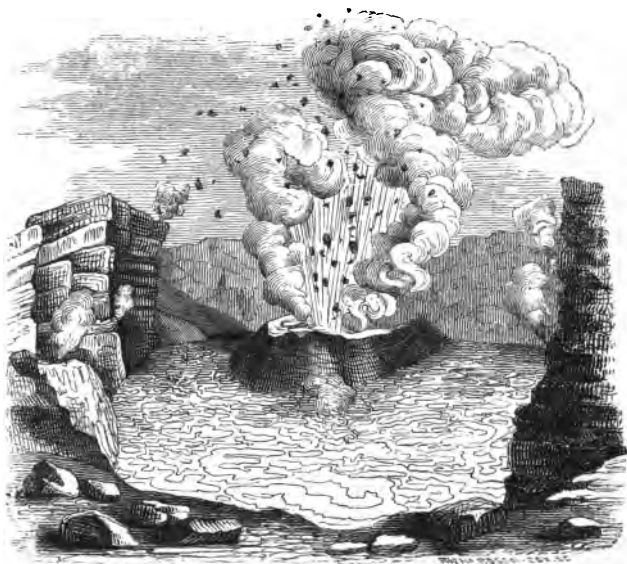
Numerous mineral species (probably not less than fifty) are found in the lavas of Vesuvius, of Somma, and in that scattered over the Phlegrean fields. Many of these species are of great interest, and some of them are peculiar to Vesuvius. This is not the place to enlarge upon a subject which is only of scientific interest. It is worthy of remark, however, that great value is attached to the instruction afforded in the theory of the origin of minerals, by the beautiful crystallized minerals found here, as the direct results of igneous agency. Moreover, the operation of the causes resulting in the production of minerals, has changed since the ancient times: for example, the Vesuvian or idocrase, is found only in the old lavas of Somma, and is unknown in the modern ejections. We succeeded, while in Naples, in gathering a full collection of the Vesuvian minerals, in forming which we received essential aid from Prof. Sacchi. The eruption of 1850 was remarkable for the finely crystallized yellow and white sal-ammoniac, which was exhaled with its lavas.

Accumulation of Lava.—Both in ascending and descending this mountain, we are impressed beyond the power of language to describe, with the incalculable amount of lava which has been ejected from Vesuvius, during the ages in which it has existed. It is mantled all over, with robe upon robe, of its own congealed overflowings, and the robes have flowed down its flanks, and covered its feet. Immense fields of bristling, ragged, black and billowy lava, now extend down the sides of Vesuvius, quite to the plains, and the lava has often flowed across the towns at its base, and invaded the sea. In no position so well as from the summit of Vesuvius, can these vast tracts of lava be seen all in one view. Their thickness is enormous; probably several thousand feet near the mountain, which still rears far above them, its venerable and beautiful form, and will probably continue for ages to come, as it has done for ages past, to afford a vent for the internal fires of this part of the globe, until it shall

be sealed up like Rocca Monfina on the road to Rome, Mount Vultur in Apuleia, or Mount Epimeo in Ischia; and until a new orifice shall be formed wherever the fire shall force a passage. The height of Vesuvius varies with its eruptions, as the cone is elevated or depressed.

In Bakewell's *Geology*, the elevation is stated at 3900 feet: probably it does not now exceed 3500 or 3600. Its height, as measured by Humboldt, was 3642 feet. The history of its former eruptions belongs to *Geology*. Since the present century began, hardly a year has occurred without an eruption. That of Oct. 24, 1822, was very remarkable. The ashes darkened the day in Naples, and spread as far as Cassano, 105 miles from the mountain. The lava was 12 feet deep and ran an Italian mile—which exceeds the English mile by nearly 800 feet. Vesuvius is inferior in altitude and in the extent of its operations to many other volcanoes, but its situation in the midst of classical Italy, and its easy accessibility, have caused it to be studied more than any volcano, except, perhaps, its colossal neighbor Etna. The foot of Vesuvius is about six miles from Naples; but to reach its summit, including the windings of the road, will be more than double that distance.

THE ORIGIN OF VESUVIUS, as regards its era, is totally unknown. It is very probable that it arose out of the sea, as many volcanoes have done, both in ancient and modern times. It is certain from the abundance of lava in the pavements in Pompeii and Herculaneum, and in the ancient Roman roads, that eruptions of Vesuvius, and of other Italian volcanoes, had occurred in very remote eras, and had preceded the foundations of Rome. Vesuvius had been covered by forests, cattle had grazed in its crater, and villas had occupied its slopes before the catastrophe of the buried cities, and the same state of things has occurred since that time, during periods of repose of centuries, in which the events of past ages, if mentioned at all, might have been regarded as fables. The lacerated and frowning walls of old Somma inform us that the modern Vesuvius, which, within the records of history, has often changed its form (grand and



Crater of Mt. Vesuvius in 1829.

interesting as it now appears,) is only a parasite mountain, which the fires have piled up, since the destruction of a vastly larger cone, of which the present walls of Somma are but an inconsiderable remnant. It is conjectured, indeed, that this more ancient cone was destroyed at the time when Pompeii and Herculaneum were buried, nor can we deny the truth of a supposition which appears not improbable.

Environs of Naples.

The environs of Naples abound with interesting objects. Several of these places we saw after our return from Sicily, but they will be mentioned in connection with those visited before we went, as the order of time is of no importance. All our excursions were along the shore of the bay, and those that I am now to describe lead to the southwest, as the preceding have conducted us in the opposite direction. And first, we will go to the Grotto of Posilippo. We drove along the admirable city road, paved with heavy hewn stones, large and flat, with the shore of the bay immediately on our left, and nothing between us and the water except some ornamented grounds. On our right were the high houses, constructed of stone, colored of a beautiful yellow, giving the streets a very lively aspect. Along this avenue, which leads to the Grotto of Posilippo, there is an almost incessant rush of elegant carriages, as it is a favorite drive of the gentry. It is almost the last week of the flowery month of May, and in this climate fields and gardens are now dressed in their gayest attire of beautiful flowers. Nothing is more common than to have bouquets of flowers, rich and various, and elegantly done up, presented as you enter or leave your carriage, or even as you ride along. We often drove in the street leading to Posilippo, and were in every excursion saluted by a bouquet, and always by the same sturdy lad, quite decently

dressed. At first we made him some returns and accepted his flowers, but finding that he always watched our movements, and was ever ready with his bouquets, we shook our heads and drove on; but this cool treatment did not discourage him; he ran to us and after us, and hung upon the carriage, and when we refused his offerings, he would throw them into the carriage, and we, to get rid of him, threw them out again. This importunity we met with in other parts of the continent, and especially in Italy.

GROTTO OF POSILIPPO.—This famous tunnel (called often also the Grotto of Puzzole) is excavated through a very lofty hill, of ancient volcanic tufa, contiguous to Naples and upon the western shore of the bay. The tunnel is 80 or 90 feet high, from 24 to 30 feet wide, and about 1000 paces, or nearly three-fifths of a mile long. Although it is usually attributed to the Romans, it is believed by antiquarians to be of a still earlier date, and that it was begun as a quarry for stone, but was eventually carried through the hill as a road. It exhibits decisive evidence of having been excavated at many different periods; for we can see in the walls the lines of cutting—and there are many such—showing that the excavation was made from above, by successive labors, until the road was brought to its present low level. It would be a very dark and gloomy gallery, only showing light at its two extremes, were it not kept constantly lighted, night and day, by lamps. In the middle of the Grotto there is a chapel in honor of the Virgin Mary; it has, of course, extra lights, which tend to diminish the gloom, and avert any fear of collision or robbery—for a great number of people and carriages, from a wide and populous district, are constantly passing through this great thoroughfare. It is an object of considerable curiosity to travellers; and being always cool in summer, it would be an agreeable transit, were it not that it has the atmosphere of a stable, although air-holes have been cut through the roof for ventilation. It greatly needs a visitation from Hercules and the purification of water. There is a powerful echo, which by reverberation very much increases

the rumbling of the carriages. The Austrians, in 1822, opened a road over the Posilippo Hill, and thus avoided the grotto. On another occasion we travelled by that road, which is deeply cut into the side of the hill of volcanic tufa, and rises to a high elevation, overlooking the nether country. In making the section along this hill, they uncovered another grotto, which also we visited. It is a grand work, the walls at the entrance are of hewn stone, and laid up to a great height and in a workmanlike manner. We walked in as far as the light would serve, for the exploration has not been carried through the hill, which it probably perforates two or three miles further south of the other tunnel, and if so it doubtless once served for a thoroughfare, and probably might serve again.* Both these tunnels are works of a great people. The one last named is fortified by masonry, obviously because the tufa is almost pulverulent, like that which buried Pompeii, and would not sustain its own weight; but the walls of the tunnel now used, although tufaceous, are firm, and do not appear to have suffered from earthquakes. We were much impressed, in passing through this grotto, with the extent and antiquity of the volcanic action in this region, for all that we saw was the result of eruptions, probably submarine and anterior to the age of Vesuvius.

THE LAKE AGNANO is about four miles from Naples, and is reached by passing through the Grotto of Posilippo. This lake is doubtless the crater of an extinct volcano. It is said to be three miles in circumference, and on one side of it carbonic acid gas is disengaged abundantly and incessantly. This strengthens the presumption of its having been anciently a crater. The form and position of the lake favor this conclusion, and volcanic eruptions are known to have taken place in its vicinity, while proofs of internal heat are now abundant and at hand.

GROTTO DEL CANI.—The opinion that the Lake of Agnano

* It is supposed to be the *Crypta Pausilypona* of the ancients, called by Seneca *Crypta Neapolitana*.

was originally a volcanic crater, is still farther favored by the vicinity of the Grotto del Cani—the Dogs' Grotto—which has been known ever since the time of Pliny, by whom it is mentioned (lib. 2, c. 90); and it is commemorated in all treatises and courses of lectures on chemistry and geology. It was, therefore, an object of much interest to us, and I cannot say that we were greatly disappointed, as it had been rendered familiar by the descriptions of preceding travellers. This long celebrated grotto is merely a small artificial excavation in the side of a volcanic hill. It has a depth of ten feet horizontally into the hill, and a diameter of four; but as it is egg-shaped, not more than two men can stand in it at once, and that stooping. As we approached the place under the direction of Antonio, a coarse man appeared dragging a little yellow starveling dog by a string tied around his neck; he then opened a small door in the side of the hill, and swinging the dog from the ground by the rope, into the hole at the bottom of the excavation, left him for a moment, where he gasped awhile, and would of course have died had not the master lifted him out by the cord and laid him upon the grass in the fresh air, where having again gasped, he soon recovered, and was ready to be *almost killed* again, when another stranger should arrive. A burning paper is extinguished in the gas, and the smoke shows where the gas rests, and fluctuates with it as currents of air in the cave give it motion. Such is the celebrated Dogs' Grotto of Pliny, famous for almost 18 centuries.

A rival cavern has been excavated in the Hill of Agnano; it is very near to the Dogs' Grotto, and is far more remarkable, as the gas is much more abundant. They call it ammonia, but it is decidedly carbonic acid gas, and the pungency with which it affects the nostrils is only the well-known sensation produced by breathing carbonic acid. This new grotto is also protected by a door; but no dog was tormented there. Possibly it is not permitted, as the king of Naples derives a revenue from the sufferings of his canine subjects!

THE VILLA OF LUCULLUS is a name given to extensive ru-

ins of a villa near the Lake Agnano, which were discovered not long since by the uncovering of a hill-side during an earthquake.

That this establishment was covered by volcanic ejections is evident from the prevalence of volcanic tufa through all these hills. The materials are not aggregated into solid rock, and are quite similar to those that covered Pompeii, to those also that form the monticules on Vesuvius, and the high hill through which the Austrians cut the road over Posilippo. It will be still more evident, from facts that remain to be stated, that this whole country, from Cape Misenum to Vesuvius, has been, in ages past, under volcanic action, which only slumbers now; and that the hills are accumulations of volcanic ejections. That there is no distinct record of the catastrophe which buried the Villa of Lucullus is not so extraordinary as that the destruction of the cities near to Vesuvius should hardly have been mentioned, or only alluded to, by the Roman writers of that age.

HOT VAPOR BATHS.—Contiguous to the ruins of the Villa of Lucullus there are several small houses in which the air is warmed by the ground on which the buildings stand. You enter the first of the series of apartments, and find the air mild and grateful; you proceed into another, which is still warmer; and the next is hot, and the next very hot, as much so as can be endured. Thus, by a graduation of temperature, the air is adapted to the cases of invalids having rheumatism, gout, and other maladies that demand an elevated temperature; and here they experience also the conjoined effect of hot aqueous vapor, and of a mild sulphureous exhalation. These natural hot air and vapor baths must be admirably adapted to many cases of infirmity. The cause is evident. At the front of these houses, we dug down only a few inches into the ground, and found it hot, and a little deeper, very hot, becoming intolerable; the earth was full of sublimed sulphur, in some places well crystallized, and hot, like that in which we walked on the summit of Vesuvius.

How instructive are these facts! Fire is still active beneath

this region. It is only a delusive repose which it now enjoys; and it is probably to be again visited by those convulsions which have certainly been experienced here in ages past. The physical phenomena of this region are intensely interesting, and highly instructive; and there are many scenes which, if they have not the grandeur and splendor of Vesuvius, hardly yield to it in their attractions, and in importance.

TOMB OF VIRGIL.—Who could neglect the sweet pastoral, and the sublime heroic poet? Certainly not those whose early training has led them to study his delightful poems, so free from the moral faults of the age in which he lived, and so full of beauty. Away then, we go as to a sacred shrine, although uncertain whether it contains, or perhaps ever did contain, a mortal relic of the immortal bard. Along our favorite drive, not through the gloomy tunnel, but in front of the splendid hill of Posilippo—we now hasten (for a rain storm is impending); and we leave our carriages when the acclivity is too great for the horses to climb farther. Deep sections have been made in the hill, in order to obtain a place for a road; and still deeper excavations are seen in the high bank, which is shaped into apartments for human beings to dwell in. What contrasts do we see from palaces to inhabited caverns! On our feet we approached Virgil's Grotto, toiling up the steep, over a paved, zig-zag street. It is cut in the same accumulated tufa which we saw at Agnano.

The place is on the summit of the hill. It is eminently picturesque and beautiful, in the midst of groves, shrubs and flowers. It commands a view of the noble bay, and of the city of Naples and Vesuvius, and the towns at its foot, and of the Sorrentine coast. There is a small temple-like structure over the supposed grave, and two commemorative slabs of marble. One of them is in the wall, with an inscription which we could hardly make out. The other is a common upright gravestone, with the following epitaph:

P.

VIRGILIO

MARONI

Mantua me genuit Calabres rapuere

Tenet nunc

Parthenope*—cecini Pascua Rura

Duces.

It is admitted that he died in Calabria, on his return from Greece, and was brought to Naples to be buried. He was probably interred at this place; but Antonio said that his bones are not here now, having been stolen by a Neapolitan prince.

BAY OF BAIÆ.—After our return from Sicily, June 2d, we twice visited the Bay of Baiæ, one of the most celebrated places in all Italy. The Bay of Naples, as already remarked, lies between Cape Misenum on the west, and Sorentum and Cape Campanella on the east. The Bay of Baiæ is situated between Cape Misenum and the small island of Nitida, about half way to Naples. Its form is circular, and it is sufficiently land-locked to afford a secure harbor. It was a principal station of the Roman fleet; and it has been already stated, that it was from Cape Misenum that its commander, the elder Pliny, the natural historian, passed over to Stabiæ, and there, on the night of August 24, A. D. 79, met his death during the eruption that buried Pompeii and the other towns.

The Bay of Baiæ was a favorite resort of the Roman Emperors, and other distinguished men, during the most flourishing periods of the empire. Around its shores, and in its immediate vicinity, were clustered in near proximity, villas, temples, baths and other public structures, whose ruins alone remain. In the same vicinity also volcanic and other phenomena have left vestiges not less remarkable, and far more enduring than the transient works of man.

Passing through the tunnel of Posilippo, we continued along the strand, where the same lofty ridge of volcanic accumulations is cut down all along the shore, and presents on the

* The poetical name of Naples.

right a high vertical wall, whose tottering masses menace the traveller.

PUZZUOLI, PUTEOLI.—Five or six miles from Naples, we entered this crowded town, standing partly on a plain and partly on a promontory. Upon the highest part of that portion which is nearest the bay are the ruins of a temple called the Temple of Augustus. Several columns remain erect with their capitals, which are now built into the walls of a very ancient cathedral, but they are still prominent. This cathedral is said to have been erected to commemorate the landing of the great Apostle Paul. However this may be, and whether the contiguous shore is the exact spot where he disembarked, is unimportant; but it is certain that he landed at Puteoli, now Puzzuoli, and thence proceeded on the Appian Way, which passed through this place, and is as perfect here as it was when a greater man than any Roman emperor travelled over it on his last journey, whose termination was Rome and martyrdom.*

Temple of Jupiter Serapis.

This most interesting and instructive ruin is on the level of the sea, in the lowest part of the town of Puzzuoli. Professor Babbage, in the *Geological Transactions* for 1831, and Sir Charles Lyell, in his *Geology*, have given able analyses of the facts regarding the gradual sinking of this temple below the level of the sea, and its re-elevation to its present position; and with it the entire coast in that vicinity, including a temple and bridges, a mole, and other structures. A view of the ruin, showing the points of scientific interest, is prefixed to Lyell's *Geology*. A stranger uninformed of the existence of this very

* In Puzzuoli, we were so pressed upon by peddlers of relics and antiques (so called), and by beggars of all ages, that the carriages could hardly move through the streets.

remarkable monument of antiquity might pass by the place without observing it, as buildings surround it on all sides. We made our way to it through an opening in the side of the street, which is very properly guarded by a door. The white marble pavement of the building remains nearly entire and in place; but brackish water is now resting upon it to the depth of about fifteen inches, in which small fishes were swimming about. A communication exists with the sea underneath the street. I have already remarked that the ruin is not visible except from higher ground; and when we entered the gate, we descended ten or twelve steps, to the level of the temple, or rather of the cross walls or elevated walk, erected a few years ago by the king, over which we passed to the centre and beyond.

Only three columns of this once beautiful structure are now standing, though four fallen fragments of another column, as large as those still remaining in place, are near at hand. These four large columns were 42 feet high, and their diameter was nearly 5 feet. The original building appears to have had 46 grand columns to support the roof, of which 24 were of granite and 22 of marble. Several columns of granite and several also of marble, of smaller dimensions, all more or less broken, are now lying about in fragments on the pavement. I measured several of the columns, both large and small; the latter were 29 inches in diameter, about half that of the larger columns. The pedestals of all the columns are seen in place under water, regularly arranged.

The building was nearly square; our guide-book for Naples gives the dimensions as 134 by 115 feet, and this corresponds very nearly with our measurement by a graduated tape.* In the centre of the building is a platform of marble, which I did not measure, but it appeared to be 20 to 25 feet in diameter.

* Sir Charles Lyell, when stating the dimensions at 66 feet for a square building, must have referred only to the central part, without including the surrounding apartments, for by measuring from the outside to the centre I found the dimensions to be more than double that number.

I have had occasion to remark, more than once, that great spoliations have been committed upon ancient Roman buildings, to afford materials for modern structures. This superb temple or bath has been robbed of its finest ornaments. Some of the most beautiful columns have been taken to Caserta to decorate the royal palace of the reigning monarch, and we doubtless owe the preservation of what remains to the injured state of the columns; the injuries, however, being chiefly the result of the borings of lithodamous shell-fish (stone-inhabiting), cause these columns to be, to the eye of a geologist, more attractive than they would have been with the original polished surface. These lithodamous shell-fishes were a kind of muscle, which have the power to perforate marble and limestone; they excavate their dwellings in this solid substance partly by chemical, partly by mechanical means; and as the animal never migrates, it enlarges its house from time to time as it increases in size. The cavity becomes in this manner cocoon shaped, and when the muscle dies the shell remains in the cavity, and thus a record is preserved of the life, works, and death of the humble historian. The columns were not fluted, and the three now standing are smooth and uninjured for about 12 feet from their bases; then they are perforated all around by the lithodomi for about 9 feet, and the remaining 20 feet or more being the upper part of the pillar, are free from perforation, but they are not free from injury. The marble, especially near the top, is deeply seamed by the dashing of the waves, and by the weather, in the direction of the natural layers, in accordance with its original structural arrangement as it lay in the quarry; the seams are therefore vertical, being in the direction of the length of the column, and from one a large piece has flaked off and fallen.

The fourth large column, mentioned above and now fallen, is perforated in the same manner as the other columns that are standing, and it was evidently done when it was, like its companions, erect and in the salt water; it could have been done in no other situation, as the animals are marine, and had it lain

on the bottom, it would have been protected from their action by the volcanic debris.

It is a mistake, as mentioned by an eminent author,* that the columns are monolithic; they are in fact in three pieces, and in one of the cylindrical portions that is prostrate there are three holes in one end of the cylindrical termination, evidently bored to receive the three iron or bronze pins or bolts that were provided to secure the joint.

The prostrate marble columns, including the smaller ones, are all bored by the lithodomi; and being quite accessible, afford a fine opportunity to examine the perforations. I observed particularly a column of red African marble (brecciated, I believe), which was so effectually bored that the holes occupied almost the entire surface, as if the work had been done by a bit or auger. One cavity was $1\frac{1}{2}$ inch in diameter in one direction, and 1 inch in the other, and 3 inches deep, so that the middle finger of the hand could, in its entire length, be passed into it. It is hardly necessary to add, that the granite columns, of which there are several lying about on the pavement, are not perforated, as they are too hard to be penetrated by the lithodomi; and they have undergone no other change than from the wearing of the waves and other chronical agents, which have produced some degree of roughness.

The geological inferences to be drawn from these facts are very important, as follows:—

The building was probably shaken by earthquakes, which threw down most of the columns and produced, of the columns that remain in place, a slight inclination towards the sea. It was not necessary that they should be monolithic, in order to account for their not having fallen; for the different sections being secured by metallic bolts, became firm as if they were one continued mass of stone.

The foundation of the building has evidently been depressed, probably by gradual subsidence, until the columns were covered

* Sir Charles Lyell.

by the sea, at least to the height of the upper perforations ; and while they were thus immersed, we know not for what length of time, they became corroded by the muscles which perforated them, as also by the sea water ; for it is to be remembered that all the columns are sensibly diminished in diameter around the upper and corroded portion. The ejections from the neighboring volcanoes threw into the sea so large a portion of loose materials as to form, along with accumulating rubbish, a protecting mass around the 12 feet nearest the bases of the columns, and thus they were saved from perforation by the muscles, and from the action of the water.

Meanwhile, that portion of the columns that was above the water was subjected to the storms and the dashing of the waves, and thus became seamed in the manner that has been mentioned. In the progress of time, the foundations, with the columns, were raised again ; the entire coast, for many miles, was elevated as it had been before depressed, and eventually the structure was redeemed from the waves. If the depression were occasioned by a gradual shrinkage of the subjacent strata by the loss of heat, the subsequent elevation may have arisen from its gradual accumulation ; for a moderate change of temperature, cooling, and heating, and extending through great depths, as of many miles,* would produce easily such a depression and elevation as has evidently taken place at Puzzuoli to more than 20 feet, and on some parts of the coast to 30 feet or more. It is certainly possible that both the depression and the elevation may have been produced by convulsive movement, or both convulsive and gradual movements may have been concerned. There is great reason to believe that the re-elevation was completed in 1538, when the great eruption took place that formed Monte Nuovo ; for even before that time there was a reputed drying up of the sea on this coast, and

* As shown by Prof. Babbage, from the experiments of Col. [now Gen.] Totten, at Newport, Rhode Island. (See American Journal of Science, vol. xxii, p. 136.)

Ferdinand and Isabella of Spain, then having dominion here, granted a portion of the land, in 1503, to the University of Puzzuoli, and in 1511 another portion to the city, "where the sea is drying up."—*Lyell's Geology*.

ERA.—It appears from a record in the atrium of the Temple, that Septimius Severus and Marcus Aurelius adorned it with marbles, and it was, therefore, in existence in the third century. All knowledge of it appears to have been lost in subsequent centuries, and it was re-discovered only about 50 years ago, although the columns showed themselves above the rubbish. It appears that the Temple had, in earlier periods, subsided at least five feet, as in 1828 a costly mosaic pavement was discovered at that depth; and another floor, probably the present marble pavement, was constructed above the water, and this in its turn has subsided 15 inches below the level of the waves. Near the Temple of Jupiter Serapis there are the ruins of a temple of Neptune and one of Vesta, now under water—the columns of that of Neptune being just even with the waves. In the Bay of Baiæ, and also opposite on the Sorentine coast, there are Roman roads under water; and in the Island of Capri, a palace of Tiberius is beneath the waves.

The remains of Caligula's bridge are still quite visible; they run out from the Island of Nitida in the manner of a mole, sustained by piers and arches; on the 6th pier the stone is bored by lithodomi, four feet above the water; on another, the borings are ten feet above the waves, and there are upon them numerous flustra (corals) and barnacles. Consequently, the structure has been depressed beneath the sea and has been again elevated.

There are barnacles and various shell-fish, such as are now found in the Mediterranean, elevated in the banks 20 and 30 feet above the waves, where they are mixed with fragments of architecture and with bones of domestic animals, proving that both the depression and the elevation have taken place in the human era.

This instance, as it has occurred in connection with the vol-

canoes in the immediate vicinity, which have been active from remote geological ages, and are active still, affords a fine illustration of the dynamics of fire. As a ruin, Jupiter Serapis is highly interesting. There are still many beautiful friezes and other carved ornamental marbles lying about on the pavement, thus proving the elegance of the building. It is very probable that it was a bath, rather than a temple. There are numerous smaller apartments still surrounding the building, and apparently forming a part of it, which may have been used for bathing rooms; the marble conduits for conveying water into them still exist. There are also hot springs coming from the Solfatara, which is not far distant, and which still boil up and steam out into the air, forming clouds of vapor; these are features of a bath and not of a temple. It would appear also extraordinary that a magnificent temple should be erected in a low situation, and in an obscure place at the foot of a hill and near the beach; but this accords well with a bath, which would be thus easily supplied with water from the hot-springs and the sea. The very obscurity of its position at present heightens the effect; when the door is opened from the street, the ruin bursts upon you suddenly; it is beautiful, grand, and venerable. I would sooner have missed seeing St. Peter's than Jupiter Serapis; but doubtless geology has had much influence in exciting this enthusiasm in my mind. We were so much interested that we made two excursions, from Naples, not to worship in, but to admire this temple, if temple it was. The evidence of its elevation and depression by geological causes is decisive, and the fact has been of great importance in establishing geological theory.

THE SOLFATARA.—Our second excursion to Jupiter Serapis was connected with one to the Solfatara, the Forum Vulcani of the ancients. This name is given to a slumbering but not extinct volcano, and has reference to the sublimation of sulphur, which is usual in such circumstances. The place which has originated this name is about one mile from the Temple of Jupiter Serapis. From that ruin we made our way to it up the Appian road, which is here in perfect order; its massive blocks of lava

having never been disturbed. The Appian Way, evidently, had branches; one led to Pompeii, and another to Puzzuoli. It was a toilsome ascent, and the ladies, each with an Italian attendant, on foot, were again placed on donkey backs, while the rest of the party travelled as pedestrians. The entrance, through a deep cut in the side of the crater, probably artificial, to admit of easy access, is very impressive. This is a large crater, formed with perfect regularity; its aged walls, more lofty and grand than those of an impregnable fortress, form an amphitheatre. I hardly dare to estimate elevations and magnitudes, where all is high and large; probably these walls, from the lip to the now quiet floor, may be 100 to 150 feet high, with a diameter of 700 to 800 feet. It was eruptive in 1198, and the fires have never become entirely extinct. If we could have entertained a doubt that we were in a volcano, whose floor was now quiet and motionless, that doubt would have been dissipated by the odor of the sulphur gases, by the sulphur itself, sublimed on the walls, and by the shattered cliffs, deeply corroded and discolored by the acid vapors constantly rising. The abyss below returned a hollow reverberation when heavy stones were thrown upon it. We advanced to the remote end of the crater, and descended by a narrow passage into a deep pit, where a grisly old man (Vulcan, rather than Charon) was striking his pick-axe into an open wound in one end of the pit, whence issued an angry blast of steam, with a terrific roar, like that of an immense boiler under enormous pressure. It was not without awe that we all gathered around this mysterious volcanic vent, and it was very interesting to observe how instantaneously, in this hot blast, sulphur and red sulphuret of arsenic (realgar), were condensed upon the workman's pick, or on our hats, held near the orifice; the arsenic instantly crystallized* brilliantly from its state of vapor.

* From different parts of the crater we obtained beautiful crystallizations of realgar and sulphur, and the old man the next morning brought good specimens to us in Naples.

No doubt this blast may blow for centuries. It tells of the power, unsubdued, which may, one day, rally again, to raise a new cone. The Neapolitan hills of volcanic tufa, evidently came from some such source as this. The sections show materials exactly like those that cover Pompeii, and the Solfatara may again one day overwhelm, as no doubt it has done before, with cinders or with ignited and flowing lava, its own ancient city, Puzzuoli.

ALUM is manufactured in the Solfatara. A deep well in the midst of the crater affords the alum water; the kettles in which the water is evaporated need no artificial fire; they were set into the floor up to the brim, and were boiling rapidly, merely by the effect of the heat from the smothered volcanic fire below. There was also a spring of water, rendered agreeably acidulous by sulphuric acid.

HOT BATHS.—Were any additional proof wanted, that fire still holds its ancient dominion beneath this region, it is found in the so-called hot baths of Nero. Two or three miles south and east from Puzzuoli, ascending a short distance in a path cut into the side of a hill of tufa, we entered some chambers excavated from the rock, open to the day by lateral window-like apertures, made by cutting the strata that form the side of the hill. We had hardly reached this internal gallery before a tall and powerful man, sinewy and bony, and naked to the waist, mysteriously appeared as if he had emerged out of the rock; and he did indeed come, I suppose, from one of its caverns. In an instant he sprang into a long gallery filled with steam, in a dense cloud of which he was immersed, and with a wizard air he silently beckoned us to follow. Happening to be nearest to him I obeyed the signal, and followed, but not without a loud caution from Antonio—often repeated—“hold down your head.” I endeavored to follow my now invisible guide, but soon found that I was too tall to carry my head beneath the current of hot steam, which was rushing along the vaulted roof of the gallery. I was compelled soon to retreat, and no one of our party seemed inclined to renew

the attempt. We lingered a short time, not knowing exactly what to expect from our half-nude man of the mountain; but not long after we heard the echo of his quick footsteps, accompanied by a deep and laborious respiration, and by the panting, as of one about to expire; and indeed, when he rushed out from the cloud of almost boiling hot steam, he exhibited a painful spectacle of a man ready to die from suffocation; his countenance was ghastly, and his body covered with large drops of water, both from perspiration and the condensation of the vapor. But he brought out with him his trophy, a bucket of the boiling water, dipped from the ever-seething fountain; it had cooled but a little below 212° (as was ascertained by a thermometer), although he brought it 200 yards, and an egg plunged into it came out quite solid. Had I been aware of the circumstances, I should have objected to this painful experiment; but I suppose it is this man's business to be parboiled in steam, as it was of the dog at the grotto to be almost killed by gas, for the entertainment of travellers.

Numerous bath rooms, still perfect, had been, in ancient times, cut out of the tufa, and there are also many seats for the bathers, and couches shaped in the soft rock, with an elevated ledge to support the head; doubtless they were furnished with some sort of cushion, and here the luxurious Roman enjoyed to the full, the pleasures of the vapor bath. There was no need of going to the boiling fountain, which few could endure, in its full force, but by the addition of proper doors and windows, the copious and never ceasing vapor could be easily sent through all these apartments, and could have been measurably diluted with cold air from the windows and doors, to bring it to the desired temperature. The boiling water is not confined to the well from which our salamander of a man brought it forth; it is so abundant that it evidently extends like a hot water bath beneath the rocky hill of tufa; for we descended, I suppose, 50 feet, vertically, then crossed the road at the foot of the cliff, and by digging with the hand a hole in the sand of the beach which borders the bay, we found

the hot water oozing up in abundance, and the heat a little below was quite intolerable; nor was this all; for in the sand beneath the salt water the thermometer rose to 150°.

Here, then, after 1800 years, we find the internal heat of the earth undiminished, thus decidedly proving the existence of a permanent source beneath, and a connection with the grand focus, whose power has been manifested now at Monte Nuovo, or in the vicinal cones and craters, now in the Solfatara, or in Vesuvius, or more anciently in Rocca Monfina, or in Mount Vultur, or in modern times in Ischia Procida, or Stromboli, and the other *Æolian* isles, or even in Etna itself.

MONTE NUOVO, OR THE NEW MOUNTAIN.—On Sunday night, September 29, 1538, the volcanic fire broke forth from the earth between Monte Barbara and Tripergola, and near to the Lake Avernus, and but a short distance from the Bay of Naples. The event had been foretold by frequent earthquakes, which, during the two preceding years, had been perceived at Puzzuoli, Naples, and in the surrounding regions. The eruption was violent, and drove the inhabitants of Puzzuoli from their mansions, to seek safety in Naples; but the ejections reached that city, and destroyed several palaces, and numbers of people were killed in the vicinity of the volcano.

The town of Tripergola, between Lake Avernus and the bay, was swallowed up, and most of its inhabitants perished. In the course of 24 hours* Monte Nuovo was piled up to the height of 440 feet, and a mile and a half in circumference. Monte Nuovo is still there and in perfection of form; a regular and beautiful volcanic cone, whose sides are covered in part with grass, and in part cultivated. We made the ascent, which was not difficult, although it was fatiguing, as the sun shone with great intensity. We walked around upon the lip of the crater, which is perfectly well defined, and is apparently as distinct as it was when first formed. Its depth is very nearly 400 feet. The crater is verdant, for there has been no volcanic

* It is even said 12 hours.

movement within it since it was formed, more than 300 years ago.

LUCRINE LAKE AND LAKE AVERNUS.—Standing on the summit of Monte Nuovo, and looking south and west, the Lucrine Lake is on the left, but it was almost filled by the eruption of 1538, and is now very small. In the position above named, the Lake Avernus is seen at the foot of Monte Nuovo; it may be half a mile in diameter, and its placid bosom gives no indication that it is the *Atra Ditis Janua*. It also was doubtless once the mouth of an active volcano, and might have suggested the poetical imagery which has been associated with it by Virgil. The word Avernus, in the Greek, means *birdless*, a place without birds, as it was said anciently that none could fly over this lake with impunity—and if on the wing over Avernus they would fall dead. Now birds swim freely on its bosom, and fishes in its waters, which I tasted and found not disagreeable.

On our right, looking towards Naples, is Monte Barbara, another volcanic mountain, of a regular form; is very near to Monte Nuovo, and is of a larger size. It is figured in Lyell's Geology, with a crater, but this was not visible from the station which we occupied.

CAVE OF THE SIBYLS.—On the side of Lake Avernus we entered an artificial cavern or gallery, cut in the tufa, and called the Cave of the Sibyls. The name was sufficiently attractive to induce our ladies to accompany us—the party being led by the guides, who bore flambeaux to enable us to find our way in this long and dark passage. It was evidently constructed with great care and toil: the side walls and the arch are very regular, but for what purpose this grand tunnel was excavated it is not easy to imagine, unless, as our guides assured us, it extends two or three miles through the hill to the ancient Cumæ, which was between the Lake Avernus and the sea-shore. They stated that the opening at the other end had been sought, but not found.

After we had gone in, perhaps a quarter of a mile, we came

to a division of the adit, and we were assured that the branch led to some very curious chambers, into which our conductors, aided by several assistants, were solicitous to carry us on their shoulders—ladies and all—as there was water on the floor of the part to which they were going. All declined the overture, except some of our young gentlemen. They were borne along by these bipeds of the cavern, but found nothing worthy of the effort. There were two chambers, perhaps fifteen feet square, and a bath where the Sibyl used to bathe in muddy water.

They pretend that from these chambers the Sibyl gave her responses; from recesses in which the wind never blows to disturb the Sibylline leaves—*ludibria ventis*—and where, should they fall into the water, they could never be gathered up. Under the temple of Apollo, at Cumæ, there was a grotto, where it is said that the oracles of Apollo were delivered by the Sibyls. This fable is not quite so absurd as the other. This remarkable gallery—a work of vast labor, and executed in a remote age—was probably wrought, like the tunnel of Posilippo, for some civil purpose. This might have been to communicate with Cumæ on one side, and the Bay of Baiæ on the other; or it may never have been completed, or its terminal opening or openings may have been filled up. In these ancient countries there is a disposition to find a locality for every memorable event or distinguished individual, and the traveller should be on his guard lest he be deceived. The best ground of reliance is upon the physical features of countries which undergo little change in historical eras. There is no doubt, for example, that the Lucrine Lake and Lake Avernus are really the waters so named by Virgil; but the romance of poetry is gone when we see them now so very small and quiet; we are however still impressed with the extent of the dominion of internal fire, and are almost willing to admit the existence of Vulcan and the Cyclops.

ANCIENT TOWNS.—Several towns in this vicinity were famous in the flourishing periods of the Roman empire. Cumæ, which gives name to the Cumæan Sibyl, was on the sea-shore,

outside of the Bay of Naples. Baïæ and Puzzuoli were on the Bay of Baïæ, and Campagna and Tripergola were near by. Puzzuoli was about three miles from Avernus, and the baths of Nero one mile—a mile more brings you to Baïæ. We arrived at the still lofty and imposing portal of Cumæ, constructed of small Roman bricks, in high preservation; but before passing beneath it, we ascended a hill to obtain a view of the ground where Cumæ lay. Along the sea-shore before us were spread its widely-extended ruins. On this hill we found excellent cherries, the black Tartarean, luscious and entirely ripe. For a trifle we were allowed as many as we pleased, and they were highly refreshing in a hot day. The towns and villages near the Bay of Baïæ were anciently crowded with villas, temples, and baths. Being the favorite resort of the rich, luxurious, and pleasure-loving among the Romans, every place along the shore was occupied: to gain room, they even erected their houses upon piers built out into the water. Such ruins are to be seen all along the shores of the Bay of Baïæ, lying more or less buried in the banks of tufa. Cicero's villa was extensive enough for a village, as appears from the great mass of ruins still very conspicuous. Here Cicero composed his *Questiones Academicæ*, and it was in returning towards Rome from this villa that he was brutally murdered, near Gaeta, by the soldiers of Mark Anthony, in the 63d year of his age, and forty-six years before Christ.

TEMPLES.—Near and at Baïæ we saw several temples in ruins, but still beautiful. The names of Mercury, Venus, and Diana are associated with them. That of Mercury is circular, with a dome, and is nearly perfect. It is 146 feet in diameter, and was sky-lighted. This temple is a whispering gallery, as we proved by trial: a whisper on one side of the temple was distinctly heard on the opposite side. Another temple stands very near the shore of the bay; its lofty brick walls, though broken here and there, are thick and firm, and may yet endure for many years. A third is in the side of a hill, and is a crumbling ruin; yet its walls still show its form.

LAKES AND PRISONS.—We passed a lake called the Mare Morto, and near it were the Elysian Fields of the ancients, now, I believe, a vineyard. We saw, also, the Lake Fusaro, the Acheron or Palus tenebrosa of Virgil, over which the souls of the good passed into Elysium. But really (although I regret to say it), if one would preserve his enthusiasm for the scenes depicted by the great poet, he should never visit the country in which they were laid, as he will find only a few insignificant lakes, used chiefly for rotting flax and hemp, and those that, while bays or lagoons are connected with the sea, and afford oysters. Lake Fusaro is famous for them, and we saw a royal lodge in the midst of it, to which the king resorts for indulgence in this luxury. We passed the tomb of Agrippina, mother of Nero, who was murdered by his command—thus he added parricide to all his other crimes.

PRISONS OF NERO.—We crossed a field on foot to see the prisons of Nero. They are horrid dens, far underground, and having neither light nor fresh air. They are very extensive—one avenue being above or below another, and they branch off in numerous ramifications. That they were prisons admits of no doubt, and if they were the dungeons of that monster, they were well worthy of him. All ancient dungeons that I have seen disgrace humanity. By torch-light we went down lower and lower, and onward farther and farther, until we were almost horrified with the interminable gloom, and, thinking of the catacombs under the church of St. Sebastian at Rome, and of the victims there (the master and pupils that wandered a returnless distance), we were fain to retrace our steps to the light of day.

THE PISCINA MIRABILE.—This name was given to a vast reservoir, constructed by Lucullus, for the supply of soft water to the inhabitants of the vicinity, and for the use of the Roman fleet at Misenum. We walked to it through a field, and saw first a large platform elevated a few feet only above the soil. This was the roof of the reservoir, which was almost perfect above, and the structure was truly astonishing below, as we perceived when we descended into it by forty steps of stone,

which are still entire. It is 225 feet long, 76 broad, and 20 high. The roof was supported by 48 pillars of brick-work; they were very large and strong, and are still perfect, except slight cracks produced by earthquakes. The water to fill it was brought from a distance of several miles by an aqueduct, which war has destroyed. How much is such a violation of the rights of humanity to be regretted! Pure air is the first physical want of man, and pure water the second. Verily man is man's greatest foe! This ancient work could, with a moderate expense, be restored to a useful condition; not so the aqueducts, by which it was filled; but even they, under a wise and vigorous government, are probably not beyond recovery. In a few places portions of the roof of the reservoir have fallen in, and these fallen masses, like those at the baths of Caracalla and other places which we have seen—being composed of bricks, and stones, and mortar—are as firm as any natural conglomerate, and from their thickness they appear like mountain ruins. This reservoir is 2000 years old.

THE MOLE AND BRIDGE OF PUZZUOLI.—The remains of this grand structure, intended both as a bridge and as a break-water to form a large and secure harbor, are in full view from the beach along which we rode. Of the 25 original arches, 13 remain, the intervening portions of the bridge having been supported on piles. The piers or pillars which support the arches, have subsided and risen again, like the columns and basis of the Temple of Jupiter Serapis; they contain, as has been already stated, the same record inscribed by the borings of the lithodromous muscles, which appear from 4 to 10 feet above the waves.

Caligula connected this permanent pier with Baize, by a bridge of two rows of boats, 3600 feet long, secured by anchors and covered with planks and sand so as to resemble the Appian way. In imitation of Xerxes, who passed the bridge which he had constructed over the Hellespont, Caligula was ambitious of achieving a similar exploit, and when his own bridge was finished, he rode over it in triumph on a splendidly capar-

ioned horse, and on a subsequent day in a triumphal chariot, followed by the admiring and applauding crowd. A few mouldering arches are all that now remain of this proud monument.

AMPHITHEATRE OF PUZZUOLI.—There was a splendid amphitheatre at Puzzuoli, which town must have been once a far more populous and important place than now. The Romans were not satisfied with the more intellectual entertainment of the comic and tragic theatres. It seems to have been a natural result of their almost incessant wars against all mankind—that they should delight in blood.

We visited this amphitheatre, which is one of the most complete remaining. In its external form it is indeed perfect, no part of the walls having been broken down, but within it is very much dilapidated. The seats were made of stones laid in mortar, and covered with stucco, which being broken up, it gives the interior a rude appearance. The arena of this amphitheatre is 187 feet by 130, and the entire diameter, from outside to outside—estimated by the eye—may be 500 feet by 400. It is said to have been capable of containing 45,000 persons, which seemed to us an exaggeration.

We were much embarrassed to account for a part of the structure, to which we have seen no parallel any where else. In the arena, and running through its longest diameter, there is an opening apparently about 10 feet in width; and all around on the periphery of the arena are other openings, like, in form, to the hatchways of a ship, and they are repeated at short distances. All these apertures were, however, so constructed, as to be capable of being closed; for this purpose evidently, there is a ledge or groove (like that in the casing of a door) for the purpose of admitting a cover to be placed securely over. We did not understand the matter any better, when we descended into an immense subterranean region, extending beneath the entire amphitheatre, which is supported upon grand pillars of brick-work, with arches extending from one to another. This brick-work is as perfect as it was on the

day when it was finished. It is evident that it has been preserved in consequence of the cavity having been filled with a volcanic pulp like that at Pompeii; it has been removed from the greater part of this subterranean world, but some of the cavities are still filled with it. This underground area is very large; it is high and airy, and even pleasant.

Unable to understand the object of this literally deep mystery, we were not at all aided to an explanation by finding in various parts of it, great numbers of Corinthian pillars of white marble, neatly and deeply fluted and piled. They were broken crosswise, evidently by violence. They may have been, and probably were, parts of the amphitheatre. Were they cast down and fractured by the insane zeal of iconoclasts, and if so, why were they anxious to give them an honorable interment in this vast sepulchre, into which they were evidently tumbled not by earthquakes, which may indeed have overthrown (possibly have broken) them—but then they would have been left lying all around in the confusion in which they fell. They could never have been placed where they now are, in any way but by human aid.

I leave these enigmas without a solution. Probably the subject has been elucidated by some of the Italian literati with whose works I am not acquainted. It is difficult to understand how the volcanic pulp was introduced. The Solfatara, however, with its still active forces is indeed at hand, and it is sufficiently elevated above the theatre to admit of the flow of water from it as from Vesuvius: nor ought it to be objected that we have no account of such a catastrophe, for few events of this nature are recorded. Experience has shown, that as at Pompeii, Herculaneum, Stabia, and other towns in that vicinity, the most appalling and calamitous events may happen, with very little or no notice from the historians of the time.

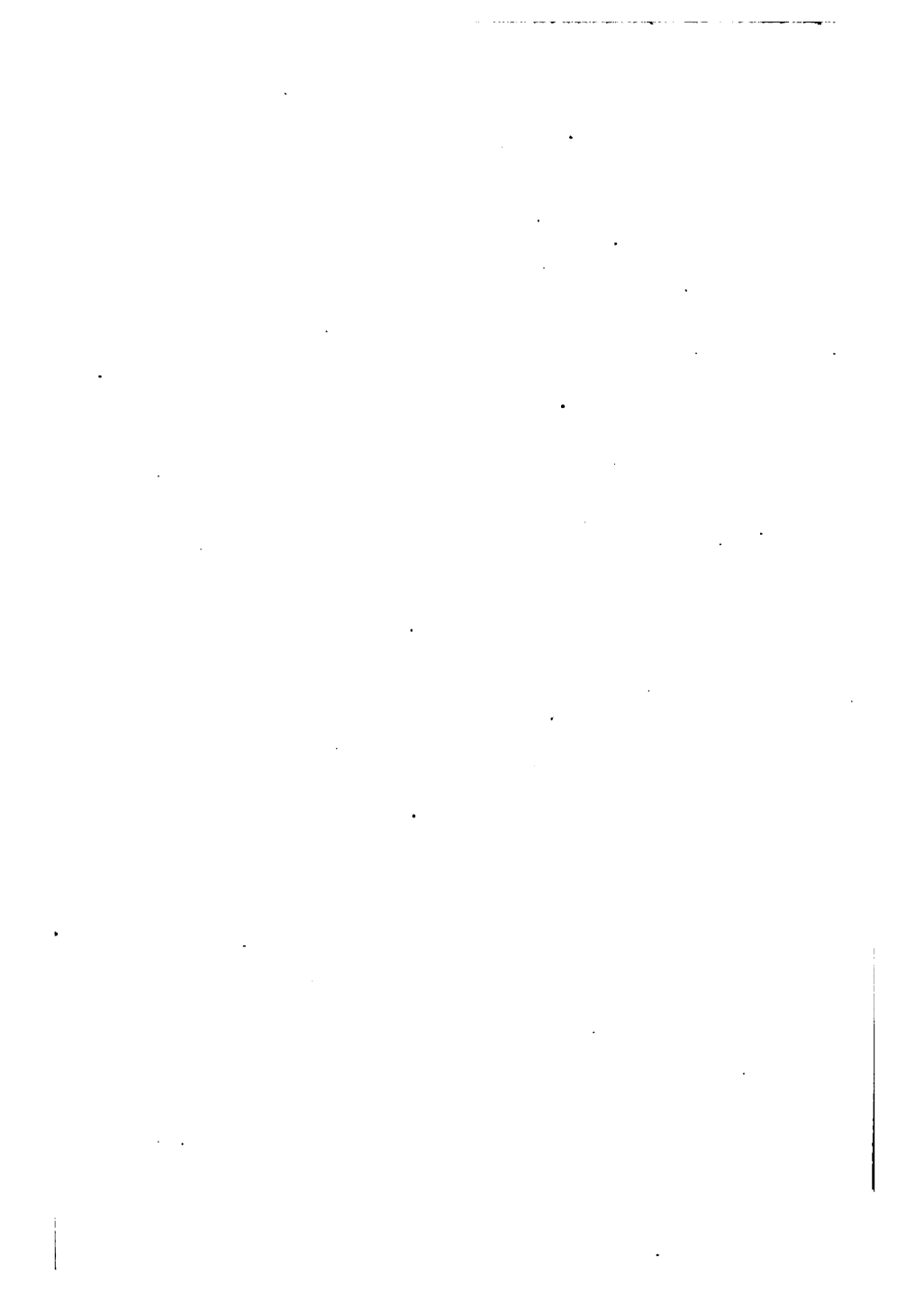
In one of the arches of this amphitheatre leading from without into the corridor, the panelled stucco is preserved: it is handsome, but is not frescoed.

The corridors of this theatre are in high preservation.

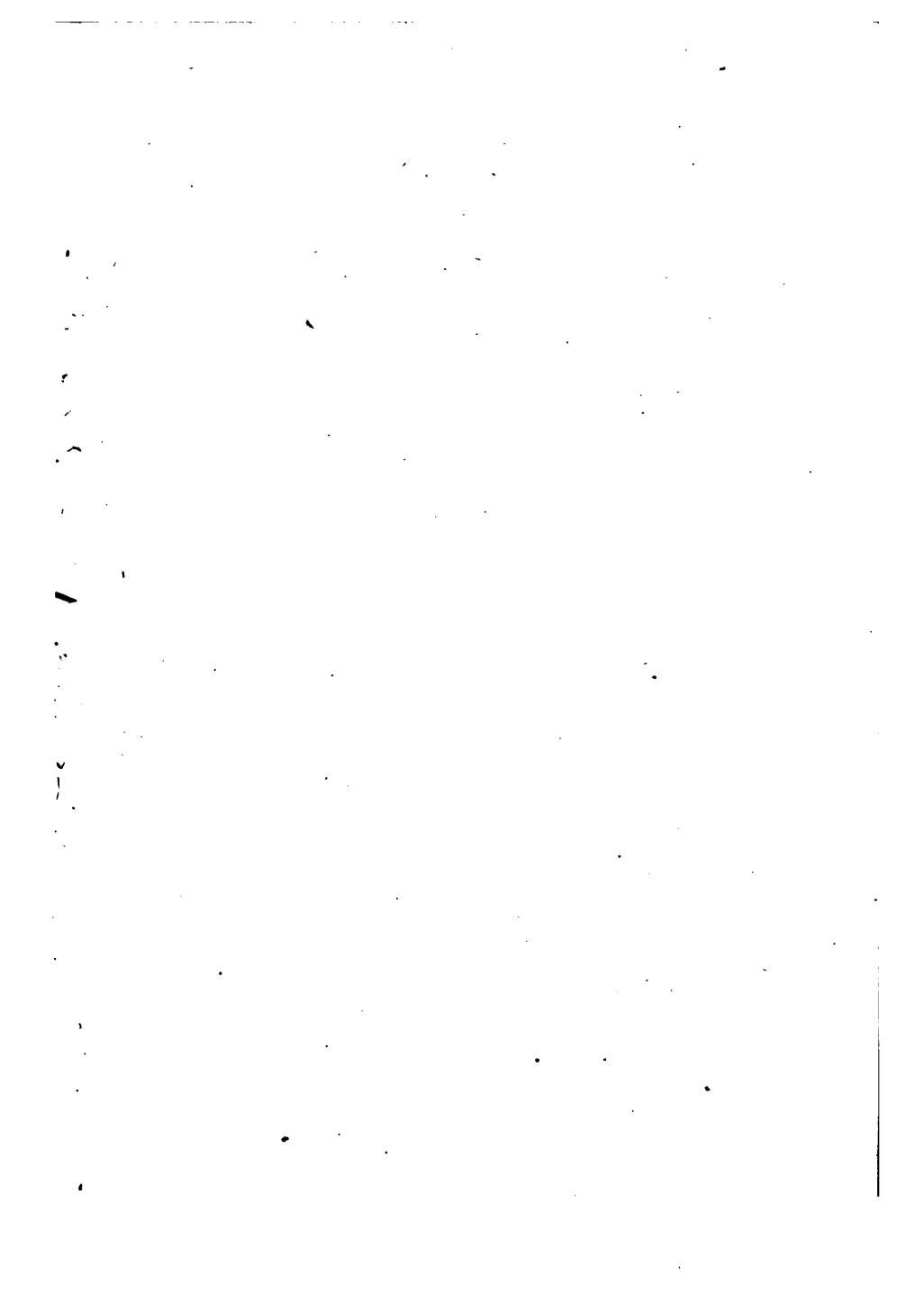
Among all the amphitheatres which we have hitherto examined, that of Nîmes is the most perfect, and this is the next.

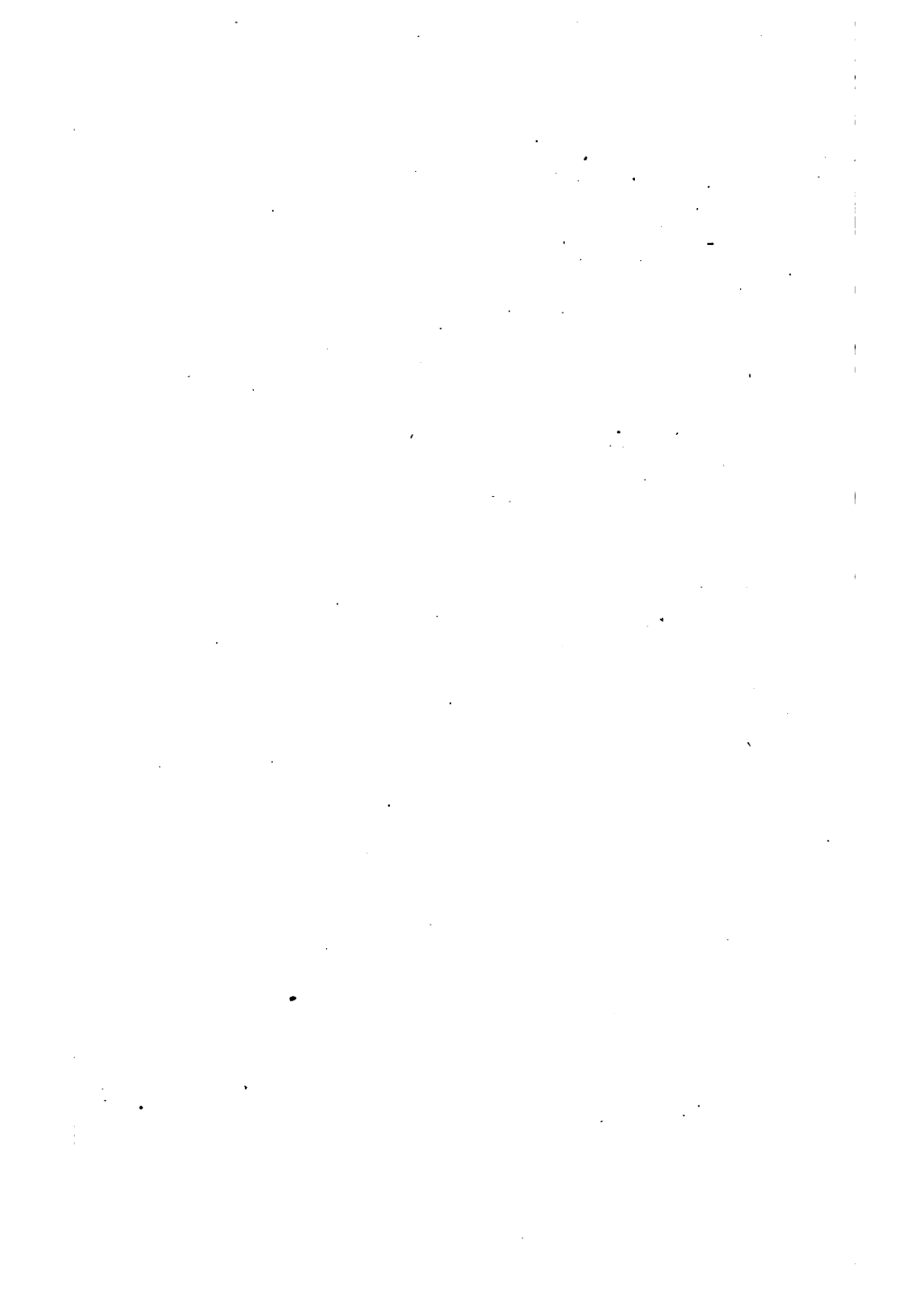
The glory of the bay of Baïæ is departed for ever. The bright Italian sky indeed sheds its lustre over the placid waters, and the rising sun gilds ruined villas and temples; but the fisherman draws his seine, where once anchored the Roman fleet, and dries his net upon the strand where Cicero recreated his leisure hours, by gathering with his friend the smooth pebbles and polished shells whose lustrous porcelain still adorns these shores.

END OF VOLUME FIRST.

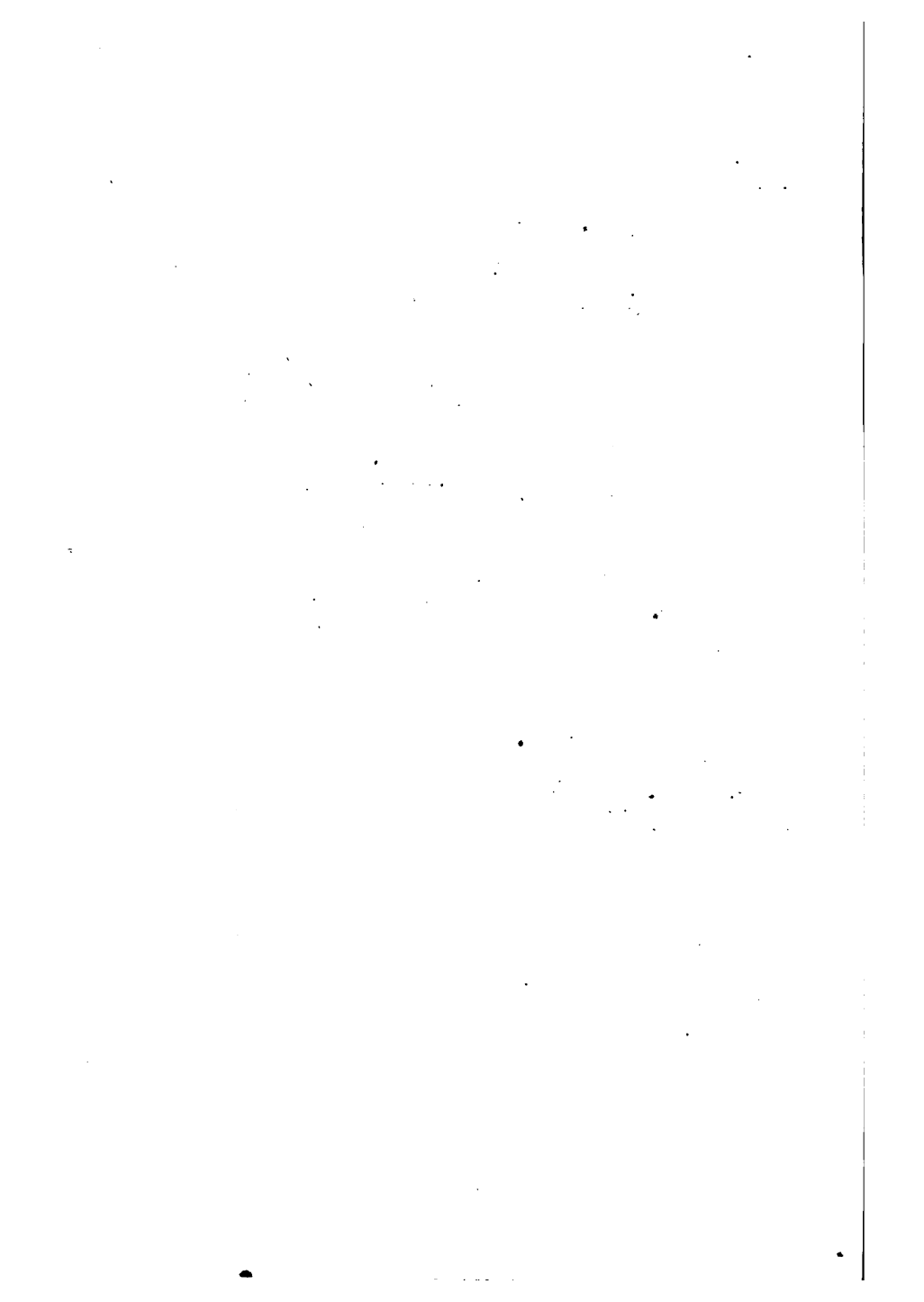














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